

WEST Search History

DATE: Thursday, September 16, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L21	Tew-K-D.IN.	2
<input type="checkbox"/>	L20	Tew-Ken-D.IN.	0
<input type="checkbox"/>	L19	Tew-Kenneth-D.IN.	2
<input type="checkbox"/>	L18	ABCA2	12
<input type="checkbox"/>	L17	L16 AND ABCA2	2
<input type="checkbox"/>	L16	536/23.1,23.5.CCLS.	17646
<input type="checkbox"/>	L15	L14	0
<input type="checkbox"/>	L14	536/23.1,23	0
<input type="checkbox"/>	L13	L12 AND ABCA2	2
<input type="checkbox"/>	L12	L11 AND ABC transporter	265
<input type="checkbox"/>	L11	435/252.3,254.11,254.2,320.1,348,419.CCLS.	29531
<input type="checkbox"/>	L10	Chen.IN.	84605
<input type="checkbox"/>	L9	Chen-Z.IN.	1987
<input type="checkbox"/>	L8	Chen-Zhijian.IN.	2
<input type="checkbox"/>	L7	Vulevic.IN.	1
<input type="checkbox"/>	L6	Vulevic-B.IN.	1
<input type="checkbox"/>	L5	Vulevic-Bojana.IN.	0
<input type="checkbox"/>	L4	Tew.IN.	615
<input type="checkbox"/>	L3	Tew-K.IN.	0
<input type="checkbox"/>	L2	Tew-Ken.IN.	0
<input type="checkbox"/>	L1	(Tew-Kenneth.IN.)	0

END OF SEARCH HISTORY

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: WO 200121798 A2, EP 1214415 A1, AU 200112495 A

Using default format because multiple data bases are involved.

L6: Entry 1 of 1

File: DWPI

Mar 29, 2001

DERWENT-ACC-NO: 2001-257989

DERWENT-WEEK: 200240

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: New nucleic acid molecule for screening inhibitors of human ABCA2 mediated transport, encoding a human ABCA2 transporter protein with a multi-domain structure including glycosylation and phosphorylation sites

INVENTOR: CHEN, Z; TEW, K D ; VULEVIC, B

PRIORITY-DATA: 1999US-154839P (September 20, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200121798 A2</u>	March 29, 2001	E	068	C12N015/12
<u>EP 1214415 A1</u>	June 19, 2002	E	000	C12N015/12
<u>AU 200112495 A</u>	April 24, 2001		000	C12N015/12

INT-CL (IPC): C12 N 15/12

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Des
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
Vulevic-B.IN.	1

Display Format:

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20040166503 A1

Using default format because multiple data bases are involved.

L8: Entry 1 of 2

File: PGPB

Aug 26, 2004

PGPUB-DOCUMENT-NUMBER: 20040166503

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040166503 A1

TITLE: Methods for gene expression profiling

PUBLICATION-DATE: August 26, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
<u>Chen, Zhijian</u>	Elkins Park	PA	US	
Shen, Hongxie	Elkins Park	PA	US	
Tew, Kenneth D.	Plymouth Meeting	PA	US	

US-CL-CURRENT: 435/6; 435/91.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. Des.
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☐ 2. Document ID: WO 2090564 A1

L8: Entry 2 of 2

File: EPAB

Nov 14, 2002

PUB-NO: WO002090564A1

DOCUMENT-IDENTIFIER: WO 2090564 A1

TITLE: METHODS FOR GENE EXPRESSION PROFILING

PUBN-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	COUNTRY
CHEN, ZHIJIAN	US
SHEN, HONGXIE	US
TEW, KENNETH D	US

INT-CL (IPC): C12 P 19/34; C12 Q 1/68; C07 H 21/04; C07 H 21/02; C07 H 21/00

ABSTRACT:

CHG DATE=20030114 STATUS=N>A method for detecting differentially expressed genes in a test sample is provided.

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Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw Desc
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
Chen-Zhijian.IN.	2

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[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20030087246 A1

Using default format because multiple data bases are involved.

L13: Entry 1 of 2

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: [435/6](#); [435/320.1](#), [435/325](#), [435/69.1](#), [435/91.2](#), [530/350](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Des.
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☐ 2. Document ID: US 20030044895 A1

L13: Entry 2 of 2

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	

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Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	FR
Duverger, Nicolas	Paris	FR
Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [435/6](#), [530/350](#), [536/23.5](#)

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KOMC	Drawn Desc
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Terms	Documents
L12 AND ABCA2	2

Display Format: [Previous Page](#)[Next Page](#)[Go to Doc#](#)

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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20030087246 A1

Using default format because multiple data bases are involved.

L17: Entry 1 of 2

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: [435/6](#); [435/320.1](#), [435/325](#), [435/69.1](#), [435/91.2](#), [530/350](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc
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☐ 2. Document ID: US 20030044895 A1

L17: Entry 2 of 2

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	

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Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	FR
Duverger, Nicolas	Paris	FR
Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [435/6](#), [530/350](#), [536/23.5](#)

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw Desc
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
L16 AND ABCA2	2

Display Format: [Previous Page](#) [Next Page](#) [Go to Doc#](#)

Hit List

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Search Results - Record(s) 1 through 12 of 12 returned.

☐ 1. Document ID: US 20040072160 A1

Using default format because multiple data bases are involved.

L18: Entry 1 of 12

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040072160

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040072160 A1

TITLE: Molecular toxicology modeling

PUBLICATION-DATE: April 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mendrick, Donna	Gaithersburg	MD	US	
Porter, Mark	Gaithersburg	MD	US	
Johnson, Kory	Gaithersburg	MD	US	
Higgs, Brandon	Gaithersburg	MD	US	
Castle, Arthur	Gaithersburg	MD	US	
Elashoff, Michael	Gaithersburg	MD	US	

US-CL-CURRENT: 435/6; 435/91.2, 436/84

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWC	Draw Desc
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☐ 2. Document ID: US 20040014040 A1

L18: Entry 2 of 12

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040014040

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040014040 A1

TITLE: Cardiotoxin molecular toxicology modeling

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mendrick, Donna	Gaithersburg	MD	US	
Porter, Mark	Gaithersburg	MD	US	
Johnson, Kory	Gaithersburg	MD	US	
Higgs, Brandon	Gaithersburg	MD	US	
Castle, Arthur	Gaithersburg	MD	US	

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Elashoff, Michael

Gaithersburg

MD

US

US-CL-CURRENT: 435/6; 702/20

ABSTRACT:

The present invention is based on the elucidation of the global changes in gene expression and the identification of toxicity markers in tissues or cells exposed to a known cardiotoxin. The genes may be used as toxicity markers in drug screening and toxicity assays. The invention includes a database of genes characterized by toxin-induced differential expression that is designed for use with microarrays and other solid-phase probes.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Des
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☐ 3. Document ID: US 20030087246 A1

L18: Entry 3 of 12

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: 435/6; 435/320.1, 435/325, 435/69.1, 435/91.2, 530/350, 536/23.5

ABSTRACT:

The present invention relates to a novel human ABCA12 gene as well as cDNAs encoding the novel full and short length ABCA12 proteins. The invention also relates to vectors and recombinants host cells comprising such nucleic acids, nucleotide probes and primers, and means for the detection of polymorphisms and mutations in the ABCA12 gene or in the corresponding protein produced by the allelic form of the ABCA12 gene.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Des
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☐ 4. Document ID: US 20030077591 A1

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L18: Entry 4 of 12

File: PGPB

Apr 24, 2003

PGPUB-DOCUMENT-NUMBER: 20030077591

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030077591 A1

TITLE: Nucleic acid for regulating the ABCA7 gene, molecules modulating its activity and therapeutic applications

PUBLICATION-DATE: April 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	
Prades, Catherine	Thiais		FR	
Arnould-Reguigne, Isabelle	Sur Marne		FR	
Fortea, Jose Osorio Y	Evry		FR	
Duverger, Nicolas	Paris		FR	
Chimini, Giovanna	Marseille		FR	

US-CL-CURRENT: 435/6; 514/44, 536/23.2

ABSTRACT:

The present invention relates to nucleic acid sequences that regulate the transcription of the ABCA7 gene, which may be involved in the metabolism of lipids in hematopoietic tissues, as well as in cell signaling mechanisms linked to the immune reaction and to inflammation. The invention also relates to polypeptides and polynucleotides that may be involved in diseases associated with the genetic locus q13 of chromosome 19.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KNOW	Draw Des
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☐ 5. Document ID: US 20030044895 A1

L18: Entry 5 of 12

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne		FR	
Duverger, Nicolas	Paris		FR	

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Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/6, 530/350, 536/23.5

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	****	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Des.
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☐ 6. Document ID: US 20020192821 A1

L18: Entry 6 of 12

File: PGPB

Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020192821

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020192821 A1

TITLE: Increased functional activity and/or expression of ABC transporters protects against the loss of dopamine neurons associated with Parkinson's disease

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Reiner, Peter B.	Vancouver		CA	
Roy, Josee	Vancouver		CA	
Connop, Bruce P.	Vancouver		CA	

US-CL-CURRENT: 435/455; 514/44

ABSTRACT:

Methods and compositions are provided for reducing the level of a catecholamine, in particular dopamine, and conjugates thereof, thus reducing catecholaminergic cell toxicity, by increasing a functional activity or increasing expression of ABC transporter polypeptides. ABC transporters serve to extrude dopamine and dopamine conjugates out of the neuron, thus preventing or reducing dopamine-associated toxicity, including cell death. Agents that increase a level of expression, or increase a functional activity, or increase both, of the ABC transporters find utility in preventing or alleviating Parkinson's disease.

Full	Title	Citation	****	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Des.
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☐ 7. Document ID: US 20020169137 A1

L18: Entry 7 of 12

File: PGPB

Nov 14, 2002

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PGPUB-DOCUMENT-NUMBER: 20020169137
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020169137 A1

TITLE: Regulation of amyloid precursor protein expression by modification of ABC transporter expression or activity

PUBLICATION-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Reiner, Peter B.	Vancouver		CA	
Connop, Bruce P.	Vancouver		CA	
Pollard, Michelle	Vancouver		CA	

US-CL-CURRENT: 514/44; 514/2

ABSTRACT:

The invention relates to the discovery that expression of amyloid precursor protein is regulated by the expression of an ABC transporter. The invention therefore provides methods and compositions for modulating amyloid precursor protein expression in a brain cell, thereby preventing or inhibiting pathological .beta.-amyloid plaque formation in conditions such as Alzheimer's disease.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc
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8. Document ID: US 20020098999 A1

L18: Entry 8 of 12

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020098999
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020098999 A1

TITLE: Compounds for sustained release of orally delivered drugs

PUBLICATION-DATE: July 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gallop, Mark A.	Los Altos	CA	US	
Cundy, Kenneth C.	Redwood City	CA	US	

US-CL-CURRENT: 514/1

ABSTRACT:

Disclosed are methods for providing sustained systemic blood concentrations of orally delivered drugs. Still further, disclosed are compounds and pharmaceutical compositions that are used in such methods.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc
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☐ 9. Document ID: US 20020016293 A1

L18: Entry 9 of 12

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020016293

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020016293 A1

TITLE: Flavopiridol drug combinations and methods with reduced side effects

PUBLICATION-DATE: February 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ratain, Mark J.	Chicago	IL	US	
Innocenti, Federico	Chicago	IL	US	
Iyer, Lalitha	Chicago	IL	US	

US-CL-CURRENT: 514/9; 514/105, 514/171, 514/252.13

ABSTRACT:

This invention provides methods, formulations and kits to reduce the toxicity of flavopiridol and analogs thereof. Disclosed are therapeutics and treatment methods employing such drugs in combination with agents that increase conjugative enzyme activity or glucuronosyltransferase activity, and agents that decrease biliary transport protein activity, such as cyclosporine A, the resultant effects of which are to decrease the significant side effects previously associated with treatment using these drugs. The invention also characterizes specific isoforms of glucuronyltransferase enzymes involved in glucuronidation of flavopiridols and their analogs.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc
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☐ 10. Document ID: JP 2004147502 A

L18: Entry 10 of 12

File: JPAB

May 27, 2004

PUB-NO: JP02004147502A

DOCUMENT-IDENTIFIER: JP 2004147502 A

TITLE: HUMAN AND RAT ABCA2 GENE

PUBN-DATE: May 27, 2004

INVENTOR-INFORMATION:

NAME	COUNTRY
INAGAKI, NOBUYA	

INT-CL (IPC): C12 N 15/09; C07 K 14/47; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 5/10; C12 Q 1/68

ABSTRACT:

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PROBLEM TO BE SOLVED: To provide a polynucleotide having a base sequence of a human or a rat ABCA2 gene useful for diagnosis of diseases, etc., caused by an abnormality in metabolite transport and an ABCA2 protein encoded with the polynucleotide and to provide a method for diagnosing the diseases.

SOLUTION: The polynucleotide has a base sequence encoding the protein having a specific amino acid sequence derived from the human or the rat. The polynucleotide has a different base sequence by substitution, addition or deletion of one or a plurality of bases thereof. The method for diagnosing the diseases associated with the ABCA2 gene comprises comparing the base sequence of the polynucleotide with the base sequence of the ABCA2 gene in a biological sample obtained from a subject.

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Full	Title	Citation	Review	Classification	Date	Reference	Claims	KWIC	Draw Des
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11. Document ID: JP 2004147502 A, WO 200208424 A1, AU 200176686 A

L18: Entry 11 of 12

File: DWPI

May 27, 2004

DERWENT-ACC-NO: 2002-179907

DERWENT-WEEK: 200441

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TITLE: Adenosine triphosphate (ATP) binding cassette transporter gene ABCA2 of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ABCA2 activity as drugs and diagnosis of ABCA2-related diseases

INVENTOR: INAGAKI, N

PRIORITY-DATA: 2000JP-0225462 (July 26, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 2004147502 A</u>	May 27, 2004		081	C12N015/09
<u>WO 200208424 A1</u>	January 31, 2002	J	119	C12N015/12
<u>AU 200176686 A</u>	February 5, 2002		000	C12N015/12

INT-CL (IPC): C07 K 14/47; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 5/00; C12 N 5/10; C12 N 15/09; C12 N 15/12; C12 Q 1/68; G01 N 33/15; G01 N 33/50; G01 N 33/68

ABSTRACTED-PUB-NO: WO 200208424A

BASIC-ABSTRACT:

NOVELTY - Polynucleotides encoding adenosine triphosphate (ATP) binding cassette transporter protein ABCA2 of human or rat origin with fully defined sequences as given in the specification or derived from these by addition, deletion and/or substitution of one or more amino acid residues, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) expression vectors including the polynucleotides;
- (2) host cells transformed by the vectors;
- (3) ABCA2 protein or its modified forms encoded by the polynucleotides;

(4) diagnosis of ABCA2-gene associated diseases by comparing the ABCA2 gene sequence in a biological sample isolated from a patient with that of the normal sequence; and

(5) screening potential promoters, inhibitors and regulators of ABCA2 activity.

ACTIVITY - Neuroprotective; nootropic; antiparkinsonian. No supporting data is given in the source material.

MECHANISM OF ACTION - ABCA2 promoter; ABCA2 inhibitor; ABCA2 regulator.

USE - Diagnosis, treatment and prevention of diseases associated with ABCA2, such as Alzheimer's disease, prion diseases, Huntington's disease, and Parkinson's disease.

Full	Title	Citation	Review	Classification	Date	Reference	Claims	KIMC	Draw Desc
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12. Document ID: WO 200121798 A2, EP 1214415 A1, AU 200112495 A

L18: Entry 12 of 12

File: DWPI

Mar 29, 2001

DERWENT-ACC-NO: 2001-257989

DERWENT-WEEK: 200240

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TITLE: New nucleic acid molecule for screening inhibitors of human ABCA2 mediated transport, encoding a human ABCA2 transporter protein with a multi-domain structure including glycosylation and phosphorylation sites

INVENTOR: CHEN, Z; TEW, K D ; VULEVIC, B

PRIORITY-DATA: 1999US-154839P (September 20, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200121798 A2</u>	March 29, 2001	E	068	C12N015/12
<u>EP 1214415 A1</u>	June 19, 2002	E	000	C12N015/12
<u>AU 200112495 A</u>	April 24, 2001		000	C12N015/12

INT-CL (IPC): C12 N 15/12

ABSTRACTED-PUB-NO: WO 200121798A

BASIC-ABSTRACT:

NOVELTY - An isolated nucleic acid (I) comprising a sequence (S1) fully defined in the specification, encoding a 2436 amino acids long human ABCA2 transporter protein having a multi-domain structure including a number of glycosylation and phosphorylation sites, a lipocalin signature motif, nucleotide binding folds having walker A and B ATP binding sites, and a number of membrane spanning helices, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated RNA molecule transcribed from (I);
- (2) an antibody (Ab) immunologically specific for the protein encoded by (I);
- (3) a plasmid, vector or retroviral vector (II), comprising a nucleotide sequence (S1);
- (4) a host cell (III) or host animal (IV) comprising S1;

(5) screening a test compound for inhibition of human ABCA2 mediated transport, by providing a host cell expressing (I), contacting the host cell with a compound suspected of inhibiting human ABC2-mediated transporter activity, and assessing inhibition of transport mediated by the compound; and

(6) a kit for detecting the presence of human ABCA2-encoding nucleic acids in a sample, comprising oligonucleotide primers specific for amplification of human ABCA2-encoding nucleic acids, polymerase enzyme, amplification buffer, and human ABCA2 specific DNA for use as a positive control.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy; human ABCA2 mediated transport inhibitor. No biological data is given.

USE - Human ABCA2 transporter polypeptides and nucleic acid encoding them are useful for identification, detection and/or molecular characterization of components involved in the transport of molecules across cell membranes. (I) is useful as a probe to detect the presence of and/or expression of genes encoding ABCA2 proteins, and in gene therapy. A host cell (III) comprising (I) is useful for screening compounds that inhibit human ABCA2 mediated transport (all claimed).

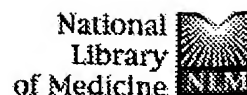
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☐ 1: Vulevic J, McCartney AL, Gee JM, Johnson IT, Gibson GR.

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Microbial Species Involved in Production of 1,2-sn-Diacylglycerol and Effects of Phosphatidylcholine on Human Fecal Microbiota.

Appl Environ Microbiol. 2004 Sep;70(9):5659-66.

PMID: 15345455 [PubMed - in process]

☐ 2: Vulevic J, Rastall RA, Gibson GR.

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Developing a quantitative approach for determining the in vitro prebiotic potential of dietary oligosaccharides.

FEMS Microbiol Lett. 2004 Jul 1;236(1):153-9.

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☐ 3: Chen ZJ, Vulevic B, Ilic KE, Soulika A, Davis W Jr, Reiner PB, Connop BP, Nathwani P, Trojanowski JQ, Tew KD.

[Related Articles, Links](#)

Association of ABCA2 expression with determinants of Alzheimer's disease.

FASEB J. 2004 Jul;18(10):1129-31. Epub 2004 May 20.

PMID: 15155565 [PubMed - in process]

☐ 4: Chatterjee SK, Laffray J, Patel P, Ravindra R, Qin Y, Kuehne ME, Bane SL.

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Interaction of tubulin with a new fluorescent analogue of vinblastine.

Biochemistry. 2002 Nov 26;41(47):14010-8.

PMID: 12437358 [PubMed - indexed for MEDLINE]

☐ 5: Vulevic B, Chen Z, Boyd JT, Davis W Jr, Walsh ES, Belinsky MG, Tew KD.

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Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (ABCA2).

Cancer Res. 2001 Apr 15;61(8):3339-47.

PMID: 11309290 [PubMed - indexed for MEDLINE]

☐ 6: O'Brien ML, Vulevic B, Freer S, Boyd J, Shen H, Tew KD.

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Glutathione peptidomimetic drug modulator of multidrug resistance-associated protein.

J Pharmacol Exp Ther. 1999 Dec;291(3):1348-55.

PMID: 10565860 [PubMed - indexed for MEDLINE]

☐ 7: Vulevic B, Lobert S, Correia JJ.

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Role of guanine nucleotides in the vinblastine-induced self-association of tubulin: effects of guanosine alpha,beta-methylenetriphosphate and guanosine alpha,beta-methylenediphosphate.

Biochemistry. 1997 Oct 21;36(42):12828-35.

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
☐ 8: Vulevic B, Correia JJ.

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Thermodynamic and structural analysis of microtubule assembly: the role of GTP hydrolysis.

Biophys J. 1997 Mar;72(3):1357-75.

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
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Interaction of vinca alkaloids with tubulin: a comparison of vinblastine, vincristine, and vinorelbine.

Biochemistry. 1996 May 28;35(21):6806-14.

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Inhibition or down-regulation of protein kinase C attenuates late phase p70s6k activation induced by epidermal growth factor but not by platelet-derived growth factor or insulin.

J Biol Chem. 1992 Apr 5;267(10):6905-9.

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
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
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
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[Clinico-epidemiological study on the digestive system diseases in students of the Belgrade university, high school and academy]

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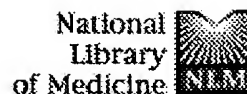
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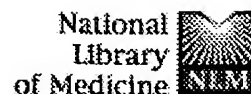
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Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (ABCA2).

Vulevic B, Chen Z, Boyd JT, Davis W Jr, Walsh ES, Belinsky MG, Tew KD.

Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA 19111, USA.

We have isolated the full-length cDNA for human ATP-binding cassette, sub-family A, member 2 transporter (ABCA2). The ORF of this cDNA encodes a protein consisting of 2436 amino acids with apparent molecular weight of M (r) 270,000. Accordingly, ABCA2 is the largest known mammalian ABC transporter described thus far. Analysis of mRNA expression levels indicated that ABCA2 is highest in human brain and has a broad expression pattern in a panel of tumor cell lines. Using specific antibodies to ABCA2 and various organelle marker proteins, ABCA2 was found to colocalize with the lysosomal/endosomal marker LAMP1, forming discrete, punctate intracellular vesicles. In ABCA2-transfected cells, the transporter also colocalized with a fluorescently labeled steroid analogue, estramustine. The sequestration of the steroid into the lysosomal/endosomal compartment indicates a potential substrate specificity for ABCA2. Furthermore, the presence of a lipocalin signature motif in the ABCA2 sequence suggests a possible broad role for this protein in the transport of steroids, lipids, and related molecules.

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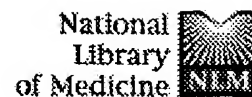
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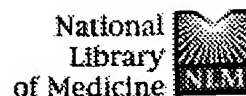
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Complete coding sequence, promoter region, and genomic structure of the human ABCA2 gene and evidence for sterol-dependent regulation in macrophages.

Kaminski WE, Piehler A, Pullmann K, Porsch-Ozcurumez M, Duong C, Bared GM, Buchler C, Schmitz G.

Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, Regensburg, 93042, Germany.

Members of the human ABC transporter A subfamily have gained considerable attention based on the recent findings that ABCA1 and ABCR (ABCA4) cause familial HDL-deficiency syndromes and distinct forms of hereditary retinopathies, respectively. Here we report the complete cDNA and the genomic organization of ABCA2, another member of the human ABC A transporter subfamily. The ABCA2 coding region is 7.3 kb in size and codes for a 2436 amino acid polypeptide that bears the typical features of a full-size ABC transporter. Among the known members of the ABC A subfamily ABCA2 shares highest homology with the cholesterol-responsive transporters ABCA1 (50%) and the recently cloned ABCA7 (44%). The ABCA2 gene comprises 48 exons which are localized within a genomic region of only 21 kb. Analysis of the putative ABCA2 promoter sequence revealed potential binding sites for transcription factors that are involved in the differentiation of myeloid and neural cells. Gene expression analysis in human macrophages showed that ABCA2 mRNA is induced during cholesterol import indicating that ABCA2 is a cholesterol-responsive gene. Our results suggest a potential role for ABCA2 in macrophage lipid metabolism and neural development.

PMID: 11178988 [PubMed - indexed for MEDLINE]

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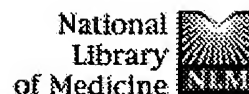
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HUGE: a database for human large proteins identified in the Kazusa cDNA sequencing project.

Nucleic Acids Res. 2000 Jan 1;28(1):331-2.

PMID: 10592264 [PubMed - indexed for MEDLINE]

☐ 2: [Nagase T, Ishikawa K, Kikuno R, Hirose M, Nomura N, Ohara O.](#) Related Articles, Links



Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1999 Oct 29;6(5):337-45.

PMID: 10574462 [PubMed - indexed for MEDLINE]

☐ 3: [Hirose M, Nagase T, Ishikawa K, Kikuno R, Nomura N, Ohara O.](#) Related Articles, Links



Characterization of cDNA clones selected by the GeneMark analysis from size-fractionated cDNA libraries from human brain.

DNA Res. 1999 Oct 29;6(5):329-36.

PMID: 10574461 [PubMed - indexed for MEDLINE]

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Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1999 Jun 30;6(3):197-205.

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Venous sac embolization of pulmonary arteriovenous malformation: preliminary experience using interlocking detachable coils.

Cardiovasc Intervent Radiol. 1999 May-Jun;22(3):210-3.

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J Rheumatol. 1999 Mar;26(3):574-9.

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Prediction of the coding sequences of unidentified human genes. XII. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1998 Dec 31;5(6):355-64.

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9: [Kikuno Y, Yokota H, Ikeno T, Okamoto F, Ishizaki M, Kawasaki S.](#) [Related Articles](#), [Links](#)



[Training of personnel for work in home medical care and social welfare]

Gan To Kagaku Ryoho. 1998 Dec;25 Suppl 4:651-5. Japanese.

PMID: 9884658 [PubMed - indexed for MEDLINE]



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Search for genes responsible for UV susceptibility of human cells: involvement of syndecan-1 in UV resistance.

Biochem Biophys Res Commun. 1998 Dec 18;253(2):519-23.

PMID: 9878568 [PubMed - indexed for MEDLINE]



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Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1998 Oct 30;5(5):277-86.

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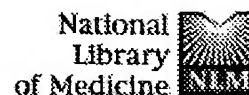
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Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

Kikuno R, Nagase T, Ishikawa K, Hirose M, Miyajima N, Tanaka A, Kotani H, Nomura N, Ohara O.

Kazusa DNA Research Institute, Kisarazu, Chiba, Japan.

To extend our cDNA project for accumulating basic information on unidentified human genes, we newly determined the sequences of 100 cDNA clones from a set of size-fractionated human adult and fetal brain cDNA libraries, and predicted the coding sequences of the corresponding genes, named KIAA1019 to KIAA1118. The sequencing of these clones revealed that the average size of the inserts and corresponding open reading frames were 5.0 kb and 2.6 kb (880 amino acid residues), respectively. Database search of the predicted amino acid sequences classified 58 predicted gene products into the five functional categories, such as cell signaling/communication, cell structure/motility, nucleic acid management, protein management and cell division. It was also found that, for 34 gene products, homologues were detected in the databases, which were similar in sequence through almost the entire regions. The chromosomal locations of the genes were determined by using human-rodent hybrid panels unless their mapping data were already available in the public databases. The expression profiles of all the genes among 10 human tissues, 8 brain regions (amygdala, corpus callosum, cerebellum, caudate nucleus, hippocampus, substantia nigra, subthalamic nucleus, and thalamus), spinal cord, fetal brain and fetal liver were also examined by reverse transcription-coupled polymerase chain reaction, products of which were quantified by enzyme-linked immunosorbent assay.

PMID: 10470851 [PubMed - indexed for MEDLINE]

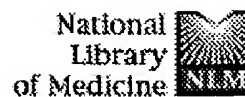
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
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
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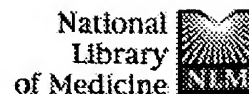
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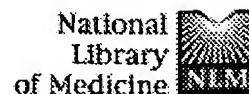
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Luciani MF, Denizot F, Savary S, Mattei MG, Chimini G.

Centre d'Immunologie, INSERM-CNRS de Marseille-Luminy, France.

The family of ATP binding cassette (ABC) transporters or traffic ATPases is composed of several membrane-associated proteins that transport a great variety of solutes across cellular membranes. Two novel mammalian members of the family, ABC1 and ABC2, have been identified by a PCR-based approach. They belong to a group of traffic ATPases encoded as a single multifunctional protein, such as CFTR, STE 6, and P-glycoproteins. Their peculiar structural features and close relationship to ABC transporters involved in nodulation suggest that ABC1 and ABC2 define a novel subgroup of mammalian traffic ATPases.

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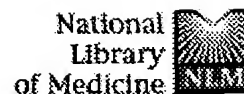
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Items 1 - 16 of 16

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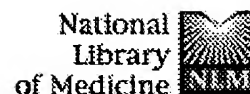
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












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
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
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
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
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
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
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
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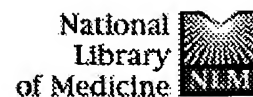
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Broccardo C, Luciani M, Chimini G.

Centre d'Immunologie de Marseille-Luminy, Parc Scientifique de Luminy, 13288, Marseille, France.

We describe here a subclass of mammalian ABC transporters, the ABCA subfamily. This is a unique group that, in contrast to any other human ABC transporters, lacks a structural counterpart in yeast. The structural hallmark of the ABCA subfamily is the presence of a stretch of hydrophobic amino acids thought to span the membrane within the putative regulatory (R) domain. As for today, four ABCA transporters have been fully characterised but 11 ABCA-encoding genes have been identified. ABCA-specific motifs in the nucleotide binding folds can be detected when analysing the conserved sequences among the different members. These motifs may reveal functional constraints exclusive to this group of ABC transporters.

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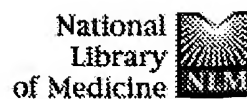
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Department of Physiology, Akita University School of Medicine, 1-1-1, Hondo, Akita 010-8543, Japan.

The ABC1 (ABCA) subfamily of the ATP-binding cassette (ABC) transporter superfamily has a structural feature that distinguishes it from other ABC transporters. Here we report the cloning, molecular characterization and tissue distribution of ABC2/ABCA2, which belongs to the ABC1 subfamily. Rat ABC2 is a protein of 2434 amino acids that has 44.5%, 40.0% and 40.8% identity with mouse ABC1/ABCA1, human ABC3/ABCA3 and human ABCR/ABCA4 respectively. Immunoblot analysis showed that proteins of 260 and 250 kDa were detected in COS-1 cells transfected with ABC2 having a haemagglutinin tag, while no band was detected in mock-transfected cells. After incubation with N-glycosidase F, the mobilities of the two proteins increased and a single band was detected, suggesting that ABC2 is a glycoprotein. Photoaffinity labelling with 8-azido-[alpha-(32)P]ATP confirmed that ATP binds to the ABC2 protein in the presence of Mg(2+). RNA blot analysis showed that ABC2 mRNA is most abundant in rat brain. Examination of brain by in situ hybridization determined that ABC2 is expressed at high levels in the white matter, indicating that it is expressed in the oligodendrocytes. ABC2, therefore, is a glycosylated ABC transporter protein, and may play an especially important role in the brain. In addition, the N-terminal 60-amino-acid sequence of the human ABC1, which was missing from previous reports, has been determined.

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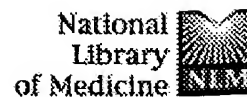
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Department of Physiology, Akita University School of Medicine, 1-1-1, Hondo, Akita 010-8543, Japan.

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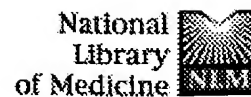
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
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
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
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
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

















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
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
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
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
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
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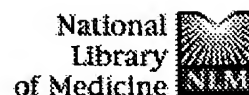
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BC Cancer Research Centre, Vancouver, British Columbia, V5Z 4L3, Canada.

Membrane proteins of the ATP-binding cassette (ABC) superfamily are involved in the transport of diverse substrates across organellar and plasma membranes of the mammalian cell. Most human ABC proteins identified to date are associated with genetically linked diseases or clinically relevant phenotypes. We describe a new human half-molecule ABC protein, designated M-ABC1, that contains a predicted single membrane and ATP-binding cassette domain. M-ABC1 is localized to membranes of the mitochondria and its transcript is expressed in all tissues. The N-terminal region of the M-ABC1 protein was shown to function independently as a mitochondrial signal sequence by its ability to target the green fluorescent protein to the mitochondria. The monomeric 60 kDa M-ABC1 protein was chemically crosslinked in vivo into a major protein species of 120-130 kDa, thereby confirming that M-ABC1 exists within a higher ordered ABC protein complex. A dominant negative repression approach using M-ABC1 protein with site-directed mutations in its Walker A motif revealed that the mutant protein was rapidly degraded and indicated that the intact Walker A motif of M-ABC1 was required for its stability. The identification of M-ABC1 extends the known distribution of members of the ABC protein family into the mammalian mitochondrion. Copyright 1999 Academic Press.

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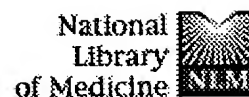
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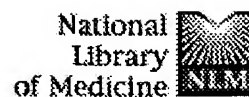
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
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
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















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















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
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
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
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
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
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
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
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
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











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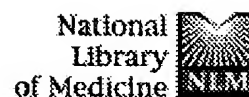
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Polymorphisms of the human homologue of the *Drosophila* white gene are associated with mood and panic disorders.

Nakamura M, Ueno S, Sano A, Tanabe H.

Department of Neuropsychiatry, Ehime University School of Medicine, Onsen-gun, Japan.

The *Drosophila* white gene is a member of the ATP-binding cassette (ABC) transporter superfamily and is involved in the cellular uptake of tryptophan. Its human homologue gene (hW) has been mapped to chromosome 21q22.3. Tryptophan is the precursor for the neurotransmitter serotonin, which has been implicated in the regulation of mood and anxiety. The locus 21q22.3 has also been reported to be associated with mood disorders. The 3'-untranslated region (3'-UTR) in the hW gene has been shown to contain a polymorphic poly(T) region. We have identified a new polymorphism G2457A in the 3'-UTR in the present study. We examined the relationship between these polymorphisms and mood and panic disorders, and a significant association between the poly(T) polymorphisms and mood disorders was detected ($P=0.039$ (allele frequency)). Associations were found between the polymorphisms and mood (poly(T) polymorphism: $P=0.047$ (allele frequency), G2457A: $P=0.040$ (allele frequency), $P=0.044$ (genotype frequency)) and panic disorders (G2457A: $P=0.026$ (allele frequency), $P=0.011$ (genotype frequency)) in males, but not in females. These findings suggest that the hW gene may be an important gene in the control of mood and anxiety as well as one of the genetic factors related to mood disorders and panic disorder in males. The statistical significance of the association remains relatively low and larger materials facilitating further dissection of the clinical phenotype will be needed to confirm and independently validate this finding and to evaluate its significance.

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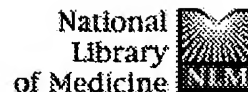
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








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
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
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
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
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
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
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
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
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


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


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


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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
















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



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
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
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
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
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
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
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
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






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










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
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
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
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
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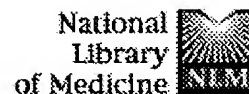
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









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








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
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
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
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
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
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
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
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
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
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
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
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
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
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




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
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













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

























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
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
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
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
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
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
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
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
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
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PMID: 8833390 [PubMed - indexed for MEDLINE]

-  **159:** [Campain JA, Gottesman MM, Pastan I.](#) [Related Articles, Links](#)

 **A novel mutant topoisomerase II alpha present in VP-16-resistant human melanoma cell lines has a deletion of alanine 429.**
Biochemistry. 1994 Sep 20;33(37):11327-32.

PMID: 7727383 [PubMed - indexed for MEDLINE]


-  **160:** [Uchiyama A, Suzuki Y, Song XQ, Fukao T, Inamura A, Tomatsu S, Shimozawa N, Kondo N, Orii T.](#) [Related Articles, Links](#)



Identification of a nonsense mutation in ALD protein cDNA from a patient with adrenoleukodystrophy.

Biochem Biophys Res Commun. 1994 Jan 28;198(2):632-6.

PMID: 8297373 [PubMed - indexed for MEDLINE]

-  **161:** [Smit JJ, Schinkel AH, Oude Elferink RP, Groen AK, Wagenaar E, van Deemter L, Mol CA, Ottenhoff R, van der Lugt NM, van Roon MA, et al.](#) [Related Articles, Links](#)



Homozygous disruption of the murine mdr2 P-glycoprotein gene leads to a complete absence of phospholipid from bile and to liver disease.

Cell. 1993 Nov 5;75(3):451-62.

PMID: 8106172 [PubMed - indexed for MEDLINE]

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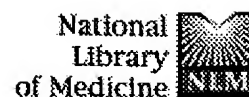
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Mutations of the retinal specific ATP binding transporter gene (ABCR) in a single family segregating both autosomal recessive retinitis pigmentosa RP19 and Stargardt disease: evidence of clinical heterogeneity at this locus.

Rozet JM, Gerber S, Ghazi I, Perrault I, Ducroq D, Souied E, Cabot A, Dufier JL, Munnich A, Kaplan J.

Unite de Recherches sur les Handicaps Genetiques de l'Enfant INSERM U-393, Paris, France.

Stargardt disease (STGD) is an autosomal recessive macular dystrophy of childhood characterised by bilateral loss of central vision over a period of several months. STGD has been mapped to chromosome 1p22.1 and recently ascribed to mutations in the retinal specific ATP binding transporter gene (ABCR). The fundus flavimaculatus with macular dystrophy (FFM), an autosomal recessive condition responsible for gradual loss of visual acuity in adulthood (second to third decade) has also been mapped to the same locus. However, a gene for autosomal recessive retinitis pigmentosa with distinctive features of choriocapillaris atrophy at an advanced stage (RP19) has been mapped to the genetic interval encompassing the STGD gene on chromosome 1p (D1S435-D1S236), raising the question of whether, despite striking differences in clinical course and presentation, RP19 and STGD might be allelic disorders at the ABCR locus. In a family segregating RP and STGD in two first cousins, we found that heterozygosity for a splicing mutation in the ABCR gene (1938-1 G-->A) resulted in STGD while hemizyosity for this splice mutation resulted in RP, and when studying the RP patient's parents, we found a maternal non-contribution with apparent segregation of a null allele ascribed to a partial deletion of the ABCR gene. The present study shows that, despite striking clinical differences, RP19 and STGD are allelic disorders at the ABCR locus.

Publication Types:

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PMID: 10874631 [PubMed - indexed for MEDLINE]

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L3 ANSWER 1 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:355085 CAPLUS
DN 140:369944
TI Human tissue-specific housekeeping genes identified by expression
profiling
IN Aburatani, Hiroyuki; Yamamoto, Shogo
PA NGK Insulators, Ltd., Japan
SO PCT Int. Appl., 372 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004035785	A1	20040429	WO 2002-JP10753	20021016
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

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L3 ANSWER 2 OF 174 USPATFULL on STN
AN 2004:94708 USPATFULL
TI Molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES

PI	US 2004072160	A1	20040415
AI	US 2002-152319	A1	20020522 (10)
PRAI	US 2001-292335P		20010522 (60)
	US 2001-297523P		20010613 (60)
	US 2001-298925P		20010619 (60)
	US 2001-303810P		20010710 (60)
	US 2001-303807P		20010710 (60)
	US 2001-303808P		20010710 (60)
	US 2001-315047P		20010828 (60)
	US 2001-324928P		20010927 (60)
	US 2001-330867P		20011101 (60)
	US 2001-330462P		20011022 (60)
	US 2001-331805P		20011121 (60)
	US 2001-336144P		20011206 (60)
	US 2001-340873P		20011219 (60)
	US 2002-357843P		20020221 (60)
	US 2002-357842P		20020221 (60)

US 2002-364134P 20020315 (60)
US 2002-370206P 20020408 (60)
US 2002-370247P 20020408 (60)
US 2002-370144P 20020408 (60)
US 2002-371679P 20020412 (60)
US 2002-372794P 20020417 (60)
DT Utility
FS APPLICATION
LN.CNT 27909
INCL INCLM: 435/006.000
INCLS: 435/091.200; 436/084.000
NCL NCLM: 435/006.000
NCLS: 435/091.200; 436/084.000
IC [7]
ICM: C12Q001-68
ICS: C12P019-34; G01N033-20
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 174 USPATFULL on STN
AN 2004:18738 USPATFULL
TI Cardiotoxin molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES
PI US 2004014040 A1 20040122
AI US 2002-191803 A1 20020710 (10)
PRAI US 2001-303819P 20010710 (60)
US 2001-305623P 20010717 (60)
US 2002-369351P 20020403 (60)
US 2002-377611P 20020506 (60)

DT Utility
FS APPLICATION
LN.CNT 15812
INCL INCLM: 435/006.000
INCLS: 702/020.000
NCL NCLM: 435/006.000
NCLS: 702/020.000
IC [7]
ICM: C12Q001-68
ICS: G06F019-00; G01N033-48; G01N033-50
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2004:462250 CAPLUS
TI Mitoxantrone resistance in a small cell lung cancer cell line is
associated with ***ABCA2*** upregulation
AU Boonstra, R.; Timmer-Bosscha, H.; van Echten-Arends, J.; van der Kolk, D.
M.; van den Berg, A.; de Jong, B.; Tew, K. D.; Poppema, S.; de Vries, E.
G. E.
CS Department of Pathology and Laboratory Medicine, University Hospital
Groningen, Neth.
SO British Journal of Cancer (2004), 90(12), 2411-2417
CODEN: BJCAAI; ISSN: 0007-0920
PB Nature Publishing Group
DT Journal
LA English
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L3 ANSWER 5 OF 174 MEDLINE on STN
AN 2004433854 IN-PROCESS
DN PubMed ID: 15340233
TI mRNA Expression of the ATP-Binding Cassette Transporter Subfamily A (ABCA)
in Rat and Human Brain Capillary Endothelial Cells.
AU Ohtsuki Sumio; Watanabe Yuki; Hori Satoko; Suzuki Hiroya; Bhongsatiern
Jiraganya; Fujiyoshi Masachika; Kamoi Mayu; Kamiya Naoko; Takanaga Hitomi;
Terasaki Tetsuya
CS Department of Molecular Biopharmacy and Genetics, Graduate School of
Pharmaceutical Sciences, Tohoku University.
SO Biological & pharmaceutical bulletin, (2004 Sep) 27 (9) 1437-40.
Journal code: 9311984. ISSN: 0918-6158.
CY Japan

LA English
 FS IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
 ED Entered STN: 20040902
 Last Updated on STN: 20040902

L3 ANSWER 6 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
 AN 2004:576743 CAPLUS
 DN 141:87097
 TI Association of ***ABCA2*** expression with determinants of Alzheimer's disease
 AU Chen, Zhijian J.; Vulevic, Bojana; Ile, Kristina E.; Soulika, Athena; Davis, Warren, Jr.; Reiner, Peter B.; Connop, Bruce P.; Nathwan, Parimal; Trojanowski, John Q.; Tew, Kenneth D.
 CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA, 19111, USA
 SO FASEB Journal (2004), 18(10), 1129-1131, 10.1096/fj.03-1490fje
 CODEN: FAJOEC; ISSN: 0892-6638
 PB Federation of American Societies for Experimental Biology
 DT Journal
 LA English
 RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L3 ANSWER 7 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:591973 CAPLUS
 DN 141:135720
 TI Tissue-specific expression of ABC transporters involved in lipid transport
 AU Inagaki, Nobuya
 CS Dep. Physiol., Akita Univ. Sch. Med., Akita, 010-8543, Japan
 SO Seikagaku (2004), 76(6), 539-545
 CODEN: SEIKAQ; ISSN: 0037-1017
 PB Nippon Seikagakkai
 DT Journal; General Review
 LA Japanese

L3 ANSWER 8 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
 AN 2004:333160 BIOSIS
 DN PREV200400336448
 TI Comparative analysis of ATP-binding cassette (ABC) transporter gene expression levels in peripheral blood leukocytes and in liver with hepatocellular carcinoma.
 AU Moustafa, Mohsen A.; Ogino, Daisuke; Nishimura, Masuhiro; Ueda, Nobuhiko; Naito, Shinsaku; Furukawa, Motori; Uchida, Takafumi; Ikai, Iwao; Sawada, Hideki; Fukumoto, Manabu [Reprint Author]
 CS Dept PatholInst Dev Aging and CancAoba Ku, Tohoku Univ, 4-1 Seiryomachi, Sendai, Miyagi, 9808575, Japan
 SO fukumoto@idac.tohoku.ac.jp
 Cancer Science, (June 2004) Vol. 95, No. 6, pp. 530-536. print.
 ISSN: 1347-9032 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 4 Aug 2004
 Last Updated on STN: 4 Aug 2004

L3 ANSWER 9 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:212987 CAPLUS
 DN 141:66135
 TI Annotation of the pRhico plasmid of Azospirillum brasilense reveals its role in determining the outer surface composition
 AU Vanbleu, Els; Marchal, Kathleen; Lambrecht, Mark; Mathys, Janick; Vanderleyden, Jos
 CS Centre of Microbial and Plant Genetics, Katholieke Universiteit Leuven, Heverlee, 3001, Belg.
 SO FEMS Microbiology Letters (2004), 232(2), 165-172
 CODEN: FMLED7; ISSN: 0378-1097
 PB Elsevier Science B.V.
 DT Journal
 LA English
 RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L3 ANSWER 10 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 4
 AN 2004:352699 BIOSIS

TI Human ATP-binding cassette transporter-2 (***ABCA2***) positively
 regulates low-density lipoprotein receptor expression and negatively
 regulates cholesterol esterification in Chinese hamster ovary cells.
 AU Davis, Warren Jr; Boyd, Jonathan T.; Ile, Kristina E.; Tew, Kenneth D.
 [Reprint Author]
 CS Dept Pharmacol, Fox Chase Canc Ctr, Philadelphia, PA, 19111, USA
 KD Tew@fccc.edu
 SO Biochimica et Biophysica Acta, (July 5 2004) Vol. 1683, No. 1-3, pp.
 89-100. print.
 ISSN: 0006-3002 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 26 Aug 2004
 Last Updated on STN: 26 Aug 2004

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 AN 2004278542 EMBASE
 TI Human ATP-binding cassette transporter-2 (***ABCA2***) positively
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 regulates cholesterol esterification in Chinese hamster ovary cells.
 AU Davis Jr. W.; Boyd J.T.; Ile K.E.; Tew K.D.
 CS K.D. Tew, Department of Pharmacology, Fox Chase Cancer Center,
 Philadelphia, PA 19111, United States. KD Tew@fccc.edu
 SO Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids, (5
 Jul 2004) 1683/1-3 (89-100).
 Refs: 40
 ISSN: 1388-1981 CODEN: BBMLFG
 PUI S 1388-1981(04)00067-8
 CY Netherlands
 DT Journal; Article
 FS 030 Pharmacology
 037 Drug Literature Index
 LA English
 SL English

L3 ANSWER 12 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
 AN 1040456781 JICST-EPlus
 TI Expression analysis of the ABC transporter ***ABCA2*** in human
 peripheral nerve
 AU WANG Y; YAMADA K; ISHIKAWA K; INAGAKI N
 CS Sch. Med. Akita Univ., Akita, Jpn
 SO Jpn J Physiol, (2004) vol. 54, no. Supplement, pp. S88. Journal Code:
 Z0753A
 CODEN: JJPHAM; ISSN: 0021-521X
 CY Japan
 DT Journal; Short Communication
 LA English
 STA New

L3 ANSWER 13 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6
 AN 2004:304377 CAPLUS
 DN 140:401127
 TI Identification of a novel first exon of the human ***ABCA2***
 transporter gene encoding a unique N-terminus
 AU Ile, Kristina E.; Davis, Warren; Boyd, Jonathan T.; Soulika, Athena M.;
 Tew, Kenneth D.
 CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA,
 19111, USA
 SO Biochimica et Biophysica Acta (2004), 1678(1), 22-32
 CODEN: BBACAQ; ISSN: 0006-3002
 PB Elsevier Science B.V.
 DT Journal
 LA English
 RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 7
 AN 2004:322513 BIOSIS
 DN PREV200400318810
 TI Association of ***ABCA2*** expression with determinants of Alzheimer's
 disease.
 AU Chen, Zhijian J.; Vulevic, Bojana; Ile, Kristina E.; Soulika, Athena;
 Davis, Warren Jr; Reiner, Peter B.; Connop, Bruce P.; Nathwan, Parimal;

CS Dept Pharmacol, Med Univ S Carolina, 173 Ashley Ave, Charleston, SC,
29425, USA
tewk@muscc.edu

SO FASEB Journal, (May 2004) Vol. 18, No. 7. print.
ISSN: 0892-6638 (ISSN print).

DT Article
LA English
ED Entered STN: 21 Jul 2004
Last Updated on STN: 21 Jul 2004

L3 ANSWER 15 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:571232 CAPLUS
DN 139:128012
TI Over-expressed gene markers useful in compositions, kits, and methods for
identification, assessment, prevention, and therapy of rheumatoid
arthritis
IN Guild, Braydon C.; Liao, Hua; Jones, Michael D.; Zolg, Johannes W.; Wu,
Jiang
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 172 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003060465	A2	20030724	WO 2002-US40271	20021217
	WO 2003060465	A3	20031211		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003224386	A1	20031204	US 2002-320352	20021216
	EP 1454146	A2	20040908	EP 2002-803318	20021217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRAI	US 2001-341942P	P	20011219		
	WO 2002-US40271	W	20021217		

L3 ANSWER 16 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:6087 CAPLUS
DN 138:84550
TI Human cDNA sequences and their encoded proteins and diagnostic and
therapeutic uses
IN Agee, Michele L.; Anderson, David W.; Berghs, Constance; Casman, Stacie
J.; Catterton, Elina; DiPippo, Vincent A.; Edinger, Shlomit R.; Eisen,
Andrew; Ellerman, Karen; Gangolli, Esha A.; Gerlach, Valerie L.; Gorman,
Linda; Guo, Xiaojia; Herrmann, John L.; Hjalt, Tord; Ji, Weizhen; Kekuda,
Ramesh; Khramtsov, Nikolai V.; Li, Li; Liu, Xiaohong; Malyankar, Uriel M.;
Miller, Charles E.; Millet, Isabelle; Ort, Tatiana; Padigaru, Muralidhara;
Patturajan, Meera; Pena, Carol E. A.; Rastelli, Luca; Rieger, Daniel K.;
Rothenberg, Mark E.; Shenoy, Suresh G.; Shimkets, Richard A.; Smithson,
Glennnda; Spaderna, Steven K.; Spytek, Kimberly A.; Stone, David J.;
Vernet, Corine A. M.; Zhong, Haihong; Zhong, Mei; Alsobrook, John P., II;
Burgess, Catherine E.; Lepley, Denise M.
PA Curagen Corporation, USA
SO PCT Int. Appl., 772 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 141

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000842	A2	20030103	WO 2002-US17443	20020604
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

	UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	US 2004009480 A1 20040115	US 2002-162335 20020603
PRAI	US 2001-295607P P 20010604	
	US 2001-295661P P 20010604	
	US 2001-296404P P 20010606	
	US 2001-296418P P 20010606	
	US 2001-296575P P 20010607	
	US 2001-297414P P 20010611	
	US 2001-297567P P 20010612	
	US 2001-297573P P 20010612	
	US 2001-298285P P 20010614	
	US 2001-298528P P 20010615	
	US 2001-299133P P 20010618	
	US 2001-299230P P 20010619	
	US 2001-299949P P 20010621	
	US 2001-300177P P 20010622	
	US 2001-300883P P 20010626	
	US 2001-301530P P 20010628	
	US 2001-301550P P 20010628	
	US 2001-302951P P 20010703	
	US 2001-308890P P 20010731	
	US 2001-322297P P 20010914	
	US 2001-324669P P 20010925	
	US 2001-337477P P 20011203	
	US 2001-341562P P 20011214	
	US 2002-358656P P 20020221	
	US 2002-359122P P 20020221	
	US 2002-358978P P 20020222	
	US 2002-359034P P 20020222	
	US 2002-359035P P 20020222	
	US 2002-359121P P 20020222	
	US 2002-359964P P 20020227	
	US 2002-360858P P 20020301	
	US 2002-363430P P 20020312	
	US 2002-363676P P 20020312	
	US 2002-371346P P 20020410	
	US 2002-379444P P 20020510	
	US 2001-298556P P 20010615	
	US 2001-311972P P 20010813	
	US 2001-315069P P 20010827	
	US 2001-315071P P 20010827	
	US 2001-315660P P 20010829	
	US 2001-322293P P 20010914	
	US 2001-322706P P 20010917	
	US 2001-341186P P 20011214	
	US 2002-361189P P 20020228	
	US 2002-363673P P 20020312	
L3	ANSWER 17 OF 174 USPATFULL on STN	
AN	2003:127034 USPATFULL	
TI	Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof	
IN	Arnould-Reguigne, Isabelle, Chennevieres Sur Marne, FRANCE	
	Prades, Catherine, Thiais, FRANCE	
	Naudin, Laurent, Etampes, FRANCE	
	Lemoine, Cendrine, Massy, FRANCE	
	Dean, Michael, Frederick, MD, UNITED STATES	
	Denefle, Patrice, Saint Maur, FRANCE	
	Rosier-Montus, Marie-Francoise, Antony, FRANCE	
PI	US 2003087246 A1 20030508	
AI	US 2002-72900 A1 20020212 (10)	
PRAI	US 2001-267715P 20010212 (60)	
DT	Utility	
FS	APPLICATION	
LN.CNT	5723	
INCL	INCLM: 435/006.000	
	INCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 435/091.200; 536/023.500	
NCL	NCLM: 435/006.000	
	NCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 435/091.200; 536/023.500	

ICM: C12Q001-68

ICS: C07H021-04; C12P019-34; C12P021-02; C12N005-06; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 174 USPATFULL on STN
AN 2003:112859 USPATFULL
TI Nucleic acid for regulating the ABCA7 gene, molecules modulating its activity and therapeutic applications
IN Denefle, Patrice, Saint Maur, FRANCE
Rosier-Montus, Marie-Francoise, Antony, FRANCE
Prades, Catherine, Thiais, FRANCE
Arnould-Reguigne, Isabelle, Sur Marne, FRANCE
Fortea, Jose Osorio Y, Evry, FRANCE
Duverger, Nicolas, Paris, FRANCE
Chimini, Giovanna, Marseille, FRANCE
PI US 2003077591 A1 20030424
AI US 2001-983446 A1 20011024 (9)
PRAI US 2000-253141P 20001128 (60)
DT Utility
FS APPLICATION
LN.CNT 5162
INCL INCLM: 435/006.000
INCLS: 514/044.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 514/044.000; 536/023.200
IC [7]

ICM: C12Q001-68

ICS: A61K048-00; C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 174 USPATFULL on STN
AN 2003:64774 USPATFULL
TI Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof
IN Denefle, Patrice, Saint Maur, FRANCE
Rosier-Montus, Marie-Francoise, Antony, FRANCE
Prades, Catherine, Thiais, FRANCE
Arnould-Reguigne, Isabelle, Chennevieres Sur Marne, FRANCE
Duverger, Nicolas, Paris, FRANCE
Allikmets, Rando, Cornwall-on Hudson, NY, UNITED STATES
Dean, Michael, Frederick, MD, UNITED STATES
PI US 2003044895 A1 20030306
AI US 2001-5338 A1 20011207 (10)
PRAI FR 2000-403440 20001207
US 2001-263231P 20010123 (60)
DT Utility
FS APPLICATION
LN.CNT 7243
INCL INCLM: 435/069.100
INCLS: 435/320.100; 435/006.000; 435/325.000; 530/350.000; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/320.100; 435/006.000; 435/325.000; 530/350.000; 536/023.500
IC [7]

ICM: C12Q001-68

ICS: C07H021-04; C12P021-02; C12N005-06; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 8
AN 2003:152689 BIOSIS
DN PREV200300152689
TI Reciprocal regulation of expression of the human adenosine 5'-triphosphate binding cassette, sub-family A, transporter 2 (***ABCA2***) promoter by the early growth response-1 (EGR-1) and Sp-family transcription factors.
AU Davis, Warren Jr.; Chen, Zhijian J.; Ile, Kristina E.; Tew, Kenneth D.
[Reprint Author]
CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA, 19111, USA
kd_tew@fccc.edu
SO Nucl. Acids Research, (February 1 2003) Vol. 31, No. 3, pp. 1097-1107.
print.
ISSN: 0305-1048 (ISSN print).
DT Article
LA English

Last Updated on STN: 19 Mar 2003

L3 ANSWER 21 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:331608 CAPLUS
DN 139:64124
TI Cloning of rat ABCA7 and its preferential expression in platelets
AU Sasaki, Mari; Shoji, Ayako; Kubo, Yoshiyuki; Nada, Shigeyuki; Yamaguchi, Akihito
CS Institute of Scientific and Industrial Research, Department of Cell Membrane Biology, Osaka University, Ibaraki, Osaka, 567-0047, Japan
SO Biochemical and Biophysical Research Communications (2003), 304(4), 777-782
CODEN: BBRCA9; ISSN: 0006-291X
PB Elsevier Science
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 9
AN 2003:63605 BIOSIS
DN PREV200300063605
TI Temporal and spatial profiles of ***ABCA2*** -expressing oligodendrocytes in the developing rat brain.
AU Tanaka, Yukiko; Yamada, Katsuya; Zhou, Cheng-Ji; Ban, Nobuhiro; Shioda, Seiji; Inagaki, Nobuya [Reprint Author]
CS Department of Physiology, Akita University School of Medicine, 1-1-1 Hondo, Akita, 010-8543, Japan
inagaki@med.akita-u.ac.jp
SO Journal of Comparative Neurology, (January 13 2003) Vol. 455, No. 3, pp. 353-367. print.
ISSN: 0021-9967 (ISSN print).
DT Article
LA English
ED Entered STN: 22 Jan 2003
Last Updated on STN: 22 Jan 2003

L3 ANSWER 23 OF 174 JICST-Eplus COPYRIGHT 2004 JST on STN
AN 1040141785 JICST-Eplus
TI The ATP-binding cassette (ABC) transporter ***ABCA2*** is associated with sphingolipids/cholesterol-rich Brij 98 rafts
AU ZHAO L-X; BAN N; INAGAKI N
CS Akita Univ. School Of Medicine, Akita, Jpn
SO Jpn J Physiol, (2003) vol. 53, no. Supplement, pp. S156. Journal Code: Z0753A
CODEN: JJPHAM; ISSN: 0021-521X
CY Japan
DT Journal; Short Communication
LA English
STA New

L3 ANSWER 24 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
AN 2003:441800 BIOSIS
DN PREV200300441800
TI Identification of novel first exon of human ***ABCA2*** transporter gene encodes unique N-terminus.
AU Davis, Warren Jr. [Reprint Author]; Ile, Kristina E. [Reprint Author]; Tew, Kenneth D. [Reprint Author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (July 2003) Vol. 44, pp. 117. print.
Meeting Info.: 94th Annual Meeting of the American Association for Cancer Research. Washington, DC, USA. July 11-14, 2003.
ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 24 Sep 2003
Last Updated on STN: 24 Sep 2003

L3 ANSWER 25 OF 174 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP/ISI on STN DUPLICATE 10
AN 2002-10006 BIOTECHDS

ABCA2 of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases; vector-mediated recombinant protein gene transfer and expression in host cell for use in drug screening and Alzheimer disease, prion disease, Huntington chorea and Parkinson disease diagnosis, prevention and therapy

AU INAGAKI N
PA BANYU PHARM CO LTD; INAGAKI N
PI WO 2002008424 31 Jan 2002
AI WO 2000-JP6457 26 Jul 2000
PRAI JP 2000-225462 26 Jul 2000
DT Patent
LA Japanese
OS WPI: 2002-179907 [23]

L3 ANSWER 26 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 11
AN 2002:637828 CAPLUS
DN 137:150263
TI Regulation of amyloid precursor protein expression in the brain cell by modification of ABC transporter expression or activity
IN Reiner, Peter B.; Connop, Bruce P.; Pollard, Michelle
PA Active Pass Pharmaceuticals, Inc., Can.
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064781	A2	20020822	WO 2002-CA138	20020208
	WO 2002064781	A3	20030626		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002169137	A1	20021114	US 2002-72621	20020208
PRAI	US 2001-267975P	P	20010209		
	US 2001-309256P	P	20010731		

L3 ANSWER 27 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 12
AN 2002:107902 CAPLUS
DN 136:161325
TI Flavopiridol drug combinations with glucuronosyltransferase activity enhancer and methods with reduced side effects by enhancing its metabolism
IN Ratain, Mark J.; Innocenti, Federico; Iyer, Lalitha
PA USA
SO U.S. Pat. Appl. Publ., 64 pp., Cont.-in-part of U.S. Ser. No. 553,829.
CODEN: USXXCO

DT Patent
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002016293	A1	20020207	US 2001-835082	20010412
PRAI	US 2000-553829	A2	20000421		

L3 ANSWER 28 OF 174 USPATFULL on STN
AN 2002:337461 USPATFULL
TI Increased functional activity and/or expression of ABC transporters protects against the loss of dopamine neurons associated with Parkinson's disease
IN Reiner, Peter B., Vancouver, CANADA
Roy, Josee, Vancouver, CANADA
Connop, Bruce P., Vancouver, CANADA
PA Active Pass Pharmaceuticals, Inc., Vancouver, CANADA (non-U.S. corporation)
PI US 2002192821 A1 20021219
AI US 2002-154452 A1 20020522 (10)

US 2001-292844P 20010522 (60)

DT Utility
FS APPLICATION
LN.CNT 3355
INCL INCLM: 435/455.000
INCLS: 514/044.000
NCL NCLM: 435/455.000
NCLS: 514/044.000
IC [7]
ICM: A61K048-00
ICS: C12N015-85

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 29 OF 174 USPATFULL on STN
AN 2002:301592 USPATFULL
TI Regulation of amyloid precursor protein expression by modification of
ABC transporter expression or activity
IN Reiner, Peter B., Vancouver, CANADA
Connop, Bruce P., Vancouver, CANADA
Pollard, Michelle, Vancouver, CANADA
PA Active Pass Pharmaceuticals, Inc., Vancouver, CANADA, V5Z 4H5 (non-U.S.
corporation)
PI US 2002169137 A1 20021114
AI US 2002-72621 A1 20020208 (10)
PRAI US 2001-267975P 20010209 (60)
US 2001-309256P 20010731 (60)

DT Utility
FS APPLICATION
LN.CNT 3827
INCL INCLM: 514/044.000
INCLS: 514/002.000
NCL NCLM: 514/044.000
NCLS: 514/002.000
IC [7]
ICM: A61K048-00
ICS: A61K038-17

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 30 OF 174 USPATFULL on STN
AN 2002:186078 USPATFULL
TI Compounds for sustained release of orally delivered drugs
IN Gallop, Mark A., Los Altos, CA, UNITED STATES
Cundy, Kenneth C., Redwood City, CA, UNITED STATES
PI US 2002098999 A1 20020725
AI US 2001-972402 A1 20011005 (9)
PRAI US 2000-238758P 20001006 (60)
US 2000-249804P 20001117 (60)
US 2001-297594P 20010611 (60)
US 2001-297654P 20010611 (60)
US 2001-297641P 20010611 (60)

DT Utility
FS APPLICATION
LN.CNT 4303
INCL INCLM: 514/001.000
NCL NCLM: 514/001.000
IC [7]
ICM: A61K031-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 31 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:519282 CAPLUS
DN 137:307883
TI Deciphering peripheral nerve myelination by using Schwann cell expression
profiling
AU Nagarajan, Rakesh; Le, Nam; Mahoney, Heather; Araki, Toshiyuki; Milbrandt,
Jeffrey
CS Departments of Pathology and Internal Medicine, Washington University
School of Medicine, St. Louis, MO, 63110, USA
SO Proceedings of the National Academy of Sciences of the United States of
America (2002), 99(13), 8998-9003
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

L3 ANSWER 32 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 13
 AN 2003:71905 BIOSIS
 DN PREV200300071905
 TI Rapid quantification of murine ABC mRNAs by real time reverse
 transcriptase-polymerase chain reaction.
 AU Su, Yan Ru [Reprint Author]; Linton, MacRae F. [Reprint Author]; Fazio,
 Sergio [Reprint Author]
 CS Atherosclerosis Research Unit, Division of Cardiology, Department of
 Medicine, Vanderbilt University Medical Center, 2220 Pierce Avenue, 383
 Preston Research Building, Nashville, TN, 37232-6300, USA
 yan.ru.su@vanderbilt.edu; macrae.linton@vanderbilt.edu;
 sergio.fazio@vanderbilt.edu
 SO Journal of Lipid Research, (December 2002) Vol. 43, No. 12, pp. 2180-2187.
 print.
 CODEN: JLPRAW. ISSN: 0022-2275.
 DT Article
 LA English
 ED Entered STN: 29 Jan 2003
 Last Updated on STN: 29 Jan 2003

L3 ANSWER 33 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 14
 AN 2003:901 BIOSIS
 DN PREV200300000901
 TI ***ABCA2*** : A candidate regulator of neural transmembrane lipid
 transport.
 AU Schmitz, G. [Reprint Author]; Kaminski, W. E.
 CS Institute for Clinical Chemistry and Laboratory Medicine, University of
 Regensburg, Franz-Josef-Strauss-Allee 11, 93042, Regensburg, Germany
 gerd.schmitz@klinik.uni-regensburg.de
 SO CMLS Cellular and Molecular Life Sciences, (August 2002) Vol. 59, No. 8,
 pp. 1285-1295. print.
 ISSN: 1420-682X.
 DT Article
 LA English
 ED Entered STN: 18 Dec 2002
 Last Updated on STN: 18 Dec 2002

L3 ANSWER 34 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2002:396249 BIOSIS
 DN PREV200200396249
 TI ***ABCA2*** transporter upregulation in mitoxantrone resistant
 GLC4-MITO cell line.
 AU Boonstra, R. [Reprint author]; Timmer-Bosscha, H.; van Echten-Arends, J.;
 van der Kolk, D. M.; van den Berg, A.; de Jong, B.; Poppema, S.; Tew, K.
 D.; de Vries, E. G. E.
 CS University Hospital Groningen, Groningen, Netherlands
 SO Proceedings of the American Association for Cancer Research Annual
 Meeting, (March, 2002) Vol. 43, pp. 779. print.
 Meeting Info.: 93rd Annual Meeting of the American Association for Cancer
 Research. San Francisco, California, USA. April 06-10, 2002.
 ISSN: 0197-016X.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 24 Jul 2002
 Last Updated on STN: 24 Jul 2002

L3 ANSWER 35 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2002:408807 BIOSIS
 DN PREV200200408807
 TI SP-family and EGR-1 transcription factors regulate expression of the human
 ABCA2 promoter.
 AU Davis, Warren, Jr. [Reprint author]; Chen, Zhijian J. [Reprint author];
 Tew, Kenneth D. [Reprint author]
 CS Fox Chase Cancer Center, Philadelphia, PA, USA
 SO Proceedings of the American Association for Cancer Research Annual
 Meeting, (March, 2002) Vol. 43, pp. 510. print.
 Meeting Info.: 93rd Annual Meeting of the American Association for Cancer
 Research. San Francisco, California, USA. April 06-10, 2002.
 ISSN: 0197-016X.

Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 31 Jul 2002
 Last Updated on STN: 23 Sep 2002

L3 ANSWER 36 OF 174 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 15
 AN 2003:77887 LIFESCI
 TI Temporal and Spatial Profiles of ***ABCA2*** -Expressing
 Oligodendrocytes in the Developing Rat Brain
 AU Tanaka, Y.; Yamada, K.; Zhou, C.-J.; Ban, N.; Shioda, S.; Inagaki, N.
 CS Department of Physiology, Akita University School of Medicine, 1-1-1
 Hondo, Akita 010-8543, Japan; E-mail: inagaki@med.akita-u.ac.jp
 SO Journal of Comparative Neurology [J. Comp. Neurol.], (20021125) vol. 455,
 no. 3, pp. 353-367.
 ISSN: 0021-9967.
 DT Journal
 FS N3
 LA English
 SL English

L3 ANSWER 37 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 16
 AN 2002:507063 BIOSIS
 DN PREV200200507063
 TI ATP-binding cassette transporter ***ABCA2*** (ABC2) expression in the
 developing spinal cord and PNS during myelination.
 AU Zhou, Cheng-Ji [Reprint author]; Inagaki, Nobuya; Pleasure, Samuel J.;
 Zhao, Li-Xia; Kikuyama, Sakae; Shioda, Seiji
 CS Department of Neurology, UCSF, 513 Parnassus Avenue, Room S-262, Box 0435,
 San Francisco, CA, 94143, USA
 zhouc@itsa.ucsf.edu; inagaki@med.akita-u.ac.jp; shioda@med.showa-u.ac.jp
 SO Journal of Comparative Neurology, (September 30, 2002) Vol. 451, No. 4,
 pp. 334-345. print.
 CODEN: JCNEAM. ISSN: 0021-9967.
 DT Article
 LA English
 ED Entered STN: 25 Sep 2002
 Last Updated on STN: 25 Sep 2002

L3 ANSWER 38 OF 174 LIFESCI COPYRIGHT 2004 CSA on STN
 AN 2002:29755 LIFESCI
 TI Multidrug resistance in cancer: Role of atp-dependent transporters
 AU Gottesman, M.M.; Fojo, T.; Bates, S.E.
 SO Nature Reviews: Cancer [Nat. Rev. Cancer], (20020100) vol. 2, no. 1, pp.
 48-58.
 ISSN: 1474-175X.
 DT Journal
 TC General Review
 FS B
 LA English
 SL English

L3 ANSWER 39 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2003:324630 BIOSIS
 DN PREV200300324630
 TI EXPRESSION OF ABCA TRANSPORTER AT RAT AND HUMAN BLOOD - BRAIN BARRIER.
 AU Ohtsuki, S. [Reprint Author]; Watanabe, Y. [Reprint Author]; Kamoi, M.
 [Reprint Author]; Kamiya, N. [Reprint Author]; Hori, S. [Reprint Author];
 Terasaki, T. [Reprint Author]
 CS Grad. Sch. of Pharm. Sci., NiChe, Tohoku Univ., Sendai, Japan
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 580.18. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 16 Jul 2003
 Last Updated on STN: 16 Jul 2003

L3 ANSWER 40 OF 174 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP/ISI on STN
 DUPLICATE 17
 AN 2001-08824 BIOTECHDS

mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites;

involving retro virus vector, plasmid pCR-XL-TOPO-mediated gene transfer for expression in bacterium, fungus, mammal, insect or plant cell

AU Tew K D; Vulevic B; Chen Z
PA Fox-Chase-Cancer-Cent.
LO Philadelphia, PA, USA.
PI WO 2001021798 29 Mar 2001
AI WO 2000-US40789 31 Aug 2000
PRAI US 1999-154839 20 Sep 1999
DT Patent
LA English
OS WPI: 2001-257989 [26]

L3 ANSWER 41 OF 174 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2002-075093 [10] WPIDS
CR 2002-239227 [24]
DNC C2002-022326

TI Combinations of flavopiridol and an agent that increases conjugative enzyme activity or glucuronosyltransferase activity, with reduced side effects, for treating cancer.

DC B05 D16
IN INNOCENTI, F; IYER, L; RATAIN, M J
PA (ARCH-N) ARCH DEV CORP
CYC 95

PI WO 2001080896 A2 20011101 (200210)* EN 145 A61K045-06
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001053618 A 20011107 (200219) A61K045-06
ADT WO 2001080896 A2 WO 2001-US12526 20010412; AU 2001053618 A AU 2001-53618 20010412

FDT AU 2001053618 A Based on WO 2001080896
PRAI US 2000-553829 20000421
IC ICM A61K045-06
ICS A61K031-445

L3 ANSWER 42 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 18

AN 2001:232542 BIOSIS
DN PREV200100232542
TI Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (***ABCA2***).
AU Vulevic, Bojana; Chen, Zhijian; Boyd, Jonathan T.; Davis, Warren, Jr.; Walsh, Eileen S.; Belinsky, Martin G.; Tew, Kenneth D. [Reprint author]
CS Department of Pharmacology, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA, 19111, USA
kd tew@fccc.edu
SO Cancer Research, (April 15, 2001) Vol. 61, No. 8, pp. 3339-3347. print.
CODEN: CNREA8. ISSN: 0008-5472.
DT Article
LA English
ED Entered STN: 16 May 2001
Last Updated on STN: 19 Feb 2002

L3 ANSWER 43 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 19

AN 2001:420739 BIOSIS
DN PREV200100420739
TI ABCA6, a novel A subclass ABC transporter.
AU Kaminski, Wolfgang E.; Wenzel, Juergen J.; Piehler, Armin; Langmann, Thomas; Schmitz, Gerd [Reprint author]
CS Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, Franz-Josef-Strauss-Allee 11, 93042, Regensburg, Germany
gerd.schmitz@klinik.uni-regensburg.de
SO Biochemical and Biophysical Research Communications, (August 3, 2001) Vol. 285, No. 5, pp. 1295-1301. print.
CODEN: BBRCA9. ISSN: 0006-291X.
DT Article
LA English

ED Entered STN: 5 Sep 2001
Last Updated on STN: 22 Feb 2002

L3 ANSWER 44 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2001:498309 BIOSIS
DN PREV200100498309
TI Immunohistochemical evidence for involvement of rat ***ABCA2*** /ABC2
in myelination.
AU Zhou, C. J. [Reprint author]; Inagaki, N.; Zhao, L. X.; Pleasure, S. J.
[Reprint author]; Shioda, S.
CS Dept Neurology, UCSF Sch Med, San Francisco, CA, USA
SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 938. print.
Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
Diego, California, USA. November 10-15, 2001.
ISSN: 0190-5295.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 24 Oct 2001
Last Updated on STN: 23 Feb 2002

L3 ANSWER 45 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 20
AN 2001:109924 BIOSIS
DN PREV200100109924
TI ATP-binding cassette transporter ABC2/ ***ABCA2*** in the rat brain: A
novel mammalian lysosome-associated membrane protein and a specific marker
for oligodendrocytes but not for myelin sheaths.
AU Zhou, Cheng-Ji; Zhao, Li-Xia; Inagaki, Nobuya; Guan, Jian-Lian; Nakajo,
Shigeo; Hirabayashi, Takahiro; Kikuyama, Sakae; Shioda, Seiichi [Reprint
author]
CS Department of Anatomy, Showa University School of Medicine, Tokyo,
142-8555, Japan
shioda@med.showa-u.ac.jp
SO Journal of Neuroscience, (February 1, 2001) Vol. 21, No. 3, pp. 849-857.
print.
CODEN: JNRSDS. ISSN: 0270-6474.
DT Article
LA English
ED Entered STN: 28 Feb 2001
Last Updated on STN: 15 Feb 2002

L3 ANSWER 46 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2002:1572 BIOSIS
DN PREV200200001572
TI Regulation of expression of the ***ABCA2*** transporter gene, a
candidate for acquired cellular resistance to the anticancer drug
estramustine.
AU Davis, Warren [Reprint author]; Vulevic, Bojana I. [Reprint author]; Chen,
Zhijian J. [Reprint author]; Tew, Kenneth D. [Reprint author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual
Meeting, (March, 2001) Vol. 42, pp. 784. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer
Research. New Orleans, LA, USA. March 24-28, 2001.
ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 28 Dec 2001
Last Updated on STN: 25 Feb 2002

L3 ANSWER 47 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2001:467680 BIOSIS
DN PREV200100467680
TI Subcellular localization and tissue distribution of ***ABCA2***
AU Vulevic, Bojana I. [Reprint author]; Boyd, Jonathan T. [Reprint author];
Tew, Kenneth D. [Reprint author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual
Meeting, (March, 2001) Vol. 42, pp. 279-280. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer

ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 3 Oct 2001
Last Updated on STN: 23 Feb 2002

L3 ANSWER 48 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 21
AN 2001:174584 BIOSIS
DN PREV200100174584
TI Complete coding sequence, promoter region, and genomic structure of the
human ***ABCA2*** gene and evidence for sterol-dependent regulation in
macrophages.
AU Kaminski, Wolfgang E.; Piehler, Armin; Puellmann, Kerstin;
Porsch-Oezcuernomez, Mustafa; Duong, Chinh; Bared, Guido Maa; Buechler,
Christa; Schmitz, Gerd [Reprint author]
CS Institute for Clinical Chemistry and Laboratory Medicine, University of
Regensburg, Franz-Josef-Strauss-Allee 11, D-93042, Regensburg, Germany
gerd.schmitz@klinik.uni-regensburg.de
SO Biochemical and Biophysical Research Communications, (February 16, 2001)
Vol. 281, No. 1, pp. 249-258. print.
CODEN: BBRCA9. ISSN: 0006-291X.
DT Article
LA English
OS Genbank-AF327657
ED Entered STN: 11 Apr 2001
Last Updated on STN: 19 Feb 2002

L3 ANSWER 49 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
AN 1010478383 JICST-EPlus
TI ATP-binding cassette transporter ABC2/ ***ABCA2*** localized
specifically in oligodendrocytes in the rat brain and associated to
lysosomes.
AU ZHOU C-J; GUAN J-L; SHIODA S
ZHAO L-X; IANGAKI N
NAKAJO S; HIRABAYASHI T
KIKUYAMA S
CS Showa Univ. School Of Medicine
Akita Univ. School Of Medicine, Akita, Jpn
Showa Univ. School Of Pharmaceutical Sci., Tokyo, Jpn
Waseda Univ. School Of Education, Tokyo, Jpn
SO Kaibogaku Zasshi (Acta Anatomica Nipponica), (2001) vol. 76, no. 1, pp.
142. Journal Code: Z0654A
ISSN: 0022-7722
CY Japan
LA English
STA New

L3 ANSWER 50 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
AN 1020064212 JICST-EPlus
TI Isolation of the ABC2 protein which express specifically in
oligodendrocyte. (Ministry of Health, Labour and Welfare S).
AU INAGAKI NOBUYA
SHIODA SEIJI
CS Akitadai I Seirigakudaiichi
Showadai I Kaibougaku
SO Fukujin Hakushitsu Jisutorofi no Chiryoho Kaihatsu no tameno Rinshoteki
oyobi Kisoteki Kenkyuhan. Heisei 12 Nendo Kenkyu Hokokusho (Annual Report
of Research Project for Development of Therapeutic Strategies for
Adrenoleukodystrophy), (2001) pp. 38. Journal Code: N20012525
CY Japan
DT Journal; Article
LA Japanese
STA New

L3 ANSWER 51 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 22
AN 2000:490542 BIOSIS
DN PREV200000490663
TI Cloning, characterization and tissue distribution of the rat ATP-binding
cassette (ABC) transporter ABC2/ ***ABCA2***
AU Zhao, Li-Xia; Zhou, Cheng-Ji; Tanaka, Arowu; Nakata, Masanori;
Hirabayashi, Takahiro; Amachi, Teruo; Shioda, Seiji; Ueda, Kazumitsu;
Inagaki, Nobuya [Reprint author]

SO Hondo, Akita, 010-8543, Japan
Biochemical Journal, (15 September, 2000) Vol. 350, No. 3, pp. 865-872.
print.
ISSN: 0264-6021.
DT Article
LA English
OS Genbank-AB037924; EMBL-AB037924; DDBJ-AB037924; Genbank-AB037937;
EMBL-AB037937; DDBJ-AB037937
ED Entered STN: 15 Nov 2000
Last Updated on STN: 10 Jan 2002

L3 ANSWER 52 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ADK15822 protein DGENE
TI New purified human ATP-binding cassette transporter13 (ABCA13) protein,
useful for diagnosing or treating diseases with aberrant activity of
ABCA13, such as hypercholesterolemia, retinal degeneration and
neurological diseases.
IN Dean M C; Arnould-Reguigne I; Prades C; Rosier-Montus M; Denefle P;
Shulenin S; Annilo T; Triunfol M L
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
(AVET) AVENTIS PHARMA SA.
PI WO 2004018633 A2 20040304 328p
AI WO 2003-US26335 20030819
PRAI US 2002-405006P 20020820
US 2003-454502P 20030312
DT Patent
LA English
OS 2004-248070 [23]
DESC Human ***ABCA2*** N-terminal peptide fragment SEQ ID NO:31.

L3 ANSWER 53 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98349 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR N-PSDB: ABV74352
DESC Human ABC transporter ABCG1 SEQ ID NO 10.

L3 ANSWER 54 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98348 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR N-PSDB: ABV74351
DESC Human ABC transporter ABCG4 SEQ ID NO 9.

L3 ANSWER 55 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98347 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p

PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74350
 DESC Human ABC transporter ***ABCA2*** SEQ ID NO 8.

L3 ANSWER 56 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB98346 Protein DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74349
 DESC Human ABC transporter ABCB1 SEQ ID NO 7.

L3 ANSWER 57 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB98345 Protein DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74348
 DESC Human ABC transporter ABCB9 SEQ ID NO 6.

L3 ANSWER 58 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABP52093 Protein DGENE
 TI Modulating activity of ATP-binding cassette (ABC) transporters by influencing dimerization of nucleotide binding domains through use of D loop sequence of an ABC transporter, or its antisense peptide or peptide mimetic -
 PA (UYGE-N) UNIV GENT.
 PI EP 1217066 A1 20020626 290p
 AI EP 2000-870316 20001221
 PRAI EP 2000-870316 20001221
 DT Patent
 LA English
 OS 2002-550404 [59]
 DESC Homo sapiens ABC transporter ***ABCA2*** protein SEQ ID NO:45.

L3 ANSWER 59 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB76716 Protein DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR N-PSDB: ABL53011

L3 ANSWER 60 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB76715 Protein DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR N-PSDB: ABL53009
 DESC Human ATP binding cassette transporter protein, ***ABCA2*** .

L3 ANSWER 61 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAB62210 Protein DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 CR N-PSDB: AAF57452
 DESC Human ***ABCA2*** transporter protein.

L3 ANSWER 62 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ADL71166 DNA DGENE
 TI Novel primer set useful for detecting expression of ABC transporter gene
 by polymerase chain reaction.
 PA (RIKO-N) ZH RIKOGAKU SHINKOKAI.
 PI JP 2004008084 A 20040115 32p
 AI JP 2002-165863 20020606
 PRAI JP 2002-165863 20020606
 DT Patent
 LA Japanese
 OS 2004-102882 [11]
 DESC PCR primer 2 used to amplify human ABC transporter ***ABCA2*** cDNA.

L3 ANSWER 63 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ADL71165 DNA DGENE
 TI Novel primer set useful for detecting expression of ABC transporter gene
 by polymerase chain reaction.
 PA (RIKO-N) ZH RIKOGAKU SHINKOKAI.
 PI JP 2004008084 A 20040115 32p
 AI JP 2002-165863 20020606
 PRAI JP 2002-165863 20020606
 DT Patent
 LA Japanese
 OS 2004-102882 [11]
 DESC PCR primer 1 used to amplify human ABC transporter ***ABCA2*** cDNA.

L3 ANSWER 64 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABV74352 DNA DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in
 preventing or treating neurological disease, e.g. Alzheimer's disease,
 comprises regulating the expression or activity of an ATP-binding
 cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent

OS 2002-667006 [71]
CR P-PSDB: ABB98349
DESC Human ABC transporter ABCG1 encoding polynucleotide SEQ ID NO 5.

L3 ANSWER 65 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74351 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98348
DESC Human ABC transporter ABCG4 encoding polynucleotide SEQ ID NO 4.

L3 ANSWER 66 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74350 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98347
DESC Human ABC transporter ***ABCA2*** encoding polynucleotide SEQ ID NO 3.

L3 ANSWER 67 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74349 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98346
DESC Human ABC transporter ABCB1 encoding polynucleotide SEQ ID NO 2.

L3 ANSWER 68 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74348 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98345

L3 ANSWER 69 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40529 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 6.

L3 ANSWER 70 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40528 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 5.

L3 ANSWER 71 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40527 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 4.

L3 ANSWER 72 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53016 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Human ATP binding cassette transporter protein, ABCA1, PCR primer #2.

L3 ANSWER 73 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53015 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]

L3 ANSWER 74 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53014 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , PCR primer
 #2.

L3 ANSWER 75 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53013 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , PCR primer
 #1.

L3 ANSWER 76 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53011 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR P-PSDB: ABB76716
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , coding
 sequence.

L3 ANSWER 77 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53009 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR P-PSDB: ABB76715
 DESC Human ATP binding cassette transporter protein, ***ABCA2*** , coding
 sequence.

AN AAF57477 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Reverse primer for amplifying a probe for ***ABCA2*** cDNA.

L3 ANSWER 79 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57476 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Forward primer for amplifying a probe for ***ABCA2*** cDNA.

L3 ANSWER 80 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57475 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Gene-specific antisense primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 81 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57474 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Universal amplification primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 82 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57473 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent

OS 2001-257989 [26]
DESC Gene-specific antisense primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 83 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57472 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC 5' RACE anchor primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 84 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57471 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Antisense gene specific primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 85 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57470 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Primer for constructing pEGFP- ***ABCA2*** clone.

L3 ANSWER 86 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57469 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Primer for constructing pEGFP- ***ABCA2*** clone.

L3 ANSWER 87 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57468 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.

AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 88 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57467 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 89 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57466 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 90 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57465 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 91 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57464 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 92 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57463 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein

sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 93 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57462 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 3' RACE forward primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 94 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57461 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 3' RACE forward primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 95 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57460 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Neasted ***ABCA2*** primer used for isolation of ***ABCA2***
 cDNA.

L3 ANSWER 96 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57459 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for isolation of ***ABCA2*** cDNA.

L3 ANSWER 97 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57458 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 5' RACE reverse primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 98 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57457 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 5' RACE reverse primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 99 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57456 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC ***ABCA2*** specific forward primer for isolation of human
 ABCA2 cDNA.

L3 ANSWER 100 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57455 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Adapter primer AP2 for isolation of human ***ABCA2*** cDNA.

L3 ANSWER 101 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57454 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831

DT Patent
 LA English
 OS 2001-257989 [26]
 DESC ***ABCA2*** specific reverse primer for isolation of human
 ABCA2 cDNA.

L3 ANSWER 102 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57453 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Adapter primer AP1 for isolation of human ***ABCA2*** cDNA.

L3 ANSWER 103 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57452 cDNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 CR P-PSDB: AAB62210
 DESC Human ***ABCA2*** transporter protein encoding cDNA.

L3 ANSWER 104 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC064542 GenBank (R)
 GenBank ACC. NO. (GBN): BC064542
 GenBank VERSION (VER): BC064542.1 GI:40555859
 CAS REGISTRY NO. (RN): 634865-83-1
 SEQUENCE LENGTH (SQL): 1986
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 13 Jan 2004
 DEFINITION (DEF): Homo sapiens ATP-binding cassette, sub-family A (ABC1),
 member 2, mRNA (cDNA clone IMAGE:5734084), partial cds.
 SOURCE: Homo sapiens (human)
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

COMMENT:

Contact: MGC help desk
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Invitrogen
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: National Institutes of Health Intramural
 Sequencing Center (NISC),
 Gaithersburg, Maryland;
 Web site: <http://www.nisc.nih.gov/>
 Contact: nisc_mgc@nhgri.nih.gov
 Akhter, N., Ayale, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
 Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
 Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
 Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R.,
 Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C.,
 McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W.,
 Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L.,
 Young, A., Zhang, L.-H. and Green, E.D.

through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
 Series: IRAK Plate: 139 Row: i Column: 6
 This clone was selected for full length sequencing because it
 passed the following selection criteria: matched mRNA gi: 15451835.

REFERENCE: 1 (bases 1 to 1986)
 AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.;
 Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.;
 Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.;
 Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.;
 Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.;
 Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.;
 Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.;
 Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.;
 Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.;
 Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.;
 Mullahy,S.J.; Bosak,S.A.; McEwan,P.J.; McKernan,K.J.;
 Malek,J.A.; Gunaratne,P.H.; Richards,S.; Worley,K.C.;
 Hale,S.; Garcia,A.M.; Gay,L.J.; Hulyk,S.W.;
 Villalon,D.K.; Muzny,D.M.; Sodergren,E.J.; Lu,X.;
 Gibbs,R.A.; Fahey,J.; Helton,E.; Kettelman,M.; Madan,A.;
 Rodrigues,S.; Sanchez,A.; Whiting,M.; Madan,A.;
 Young,A.C.; Shevchenko,Y.; Bouffard,G.G.;
 Blakesley,R.W.; Touchman,J.W.; Green,E.D.;
 Dickson,M.C.; Rodriguez,A.C.; Grimwood,J.; Schmutz,J.;
 Myers,R.M.; Butterfield,Y.S.; Krzywinski,M.I.;
 Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.;
 Jones,S.J.; Marra,M.A.
 TITLE (TI): Generation and initial analysis of more than 15,000
 full-length human and mouse cDNA sequences
 JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903
 (2002)
 OTHER SOURCE (OS): CA 138:84317
 REFERENCE: 2 (bases 1 to 1986)
 AUTHOR (AU): Strausberg,R.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (22-DEC-2003) National Institutes of Health,
 Mammalian Gene Collection (MGC), Cancer Genomics
 Office, National Cancer Institute, 31 Center Drive,
 Room 11A03, Bethesda, MD 20892-2590, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1986	/organism="Homo sapiens" /mol-type="mRNA" /db-xref="taxon:9606" /clone="IMAGE:5734084" /tissue-type="Brain, hippocampus" /clone-lib="NIH-MGC-124" /lab-host="DH10B" /note="Vector: pCMV-SPORT6"
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CDS	37..>1986	/gene="ABCA2" /codon-start=1 /product="ABCA2 protein" /protein-id="AAH64542.1" /db-xref="GI:40555860" /db-xref="LocusID:20" /db-xref="MIM:600047" /translation="MGFLHQQLLLWKNVTLKRR SPWVLAFEIFIPLVLFILLGLRQ KKPTISVKEVSFYTAAPLTSAGILPVMQSLCPDG QRDEFGFLQYANSTVTQLLERLDR VVEEGLNLFDPARPSLGSELEALRQHLEALSAGPG TSGSHLDRSTVSSFSLDSVARNPQ ELWRFLTQNLSPNSTAQALLAARVDPPEVYHLL FGPSSALDSQSGLHKGQEPWSRLG GNPLFRMEELLLAPALLEQLTCTPGSGELGRILT VPESQKGALQGYRDAVCSGQAAAR ARRFSGLSAELRNQLDVAKVSQQLGLDAPNGSDS SPQAPPPRRLQALLGDLLDAQKVL QDQDVLSALALLLPQGACTGRTPGPPASGAGGAA

LATPDTLQGQCSAFVQLWAGLQPILCGNNRTIEP
 EALRRGNMSSLGFTSKEQRNLGLL
 VHLMTSNPKILYAPAGSEVDRVILKANETFAFVG
 NVTHYAQVWLNISAEIRSFLEQGR
 LQOHLRWLQQYVAELRLHPEALNLSLDELPPALR
 QDNFSLPSGMALLQOLDTIDNAAC
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L3 ANSWER 105 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AY421586 GenBank (R)
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 GenBank VERSION (VER): AY421586.1 GI:39748445
 CAS REGISTRY NO. (RN): 629085-72-9
 SEQUENCE LENGTH (SQL): 5743
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Genome Survey Sequence
 DATE (DATE): 17 Dec 2003
 DEFINITION (DEF): Mus musculus ***ABCA2*** gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence.
 GSS
 KEYWORDS (ST): Mus musculus (house mouse)
 SOURCE: Mus musculus
 ORGANISM (ORGN): Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Rodentia;
 Sciurognathi; Muridae; Murinae; Mus

COMMENT:

This sequence was made by sequencing genomic exons and ordering them based on alignment.

REFERENCE:

1 (bases 1 to 5743)
 AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.; Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.; Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.; White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
 TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse orthologous gene trios
 JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)

REFERENCE: 2 (bases 1 to 5743)
AUTHOR (AU): Clark, A.G.; Glanowski, S.; Nielson, R.; Thomas, P.;
Kejariwal, A.; Todd, M.A.; Tanenbaum, D.M.; Civello, D.R.;
Lu, F.; Murphy, B.; Ferriera, S.; Wang, G.; Zheng, X.H.;
White, T.J.; Sninsky, J.J.; Adams, M.D.; Cargill, M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-NOV-2003) Celera Genomics, 45 West Gude
Drive, Rockville, MD 20850, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
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121	tcagccggca	tcttgcccgt	catgcagtcg	ctttgcccctg	atggccagcg	tgatgagttt
181	ggcttcctgc	aatatgccaa	ctccacnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
241	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
301	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
361	nnnnnnnnnn	tttcacccct	ctctctggac	tccgtggcca	gggaccagag	agagctttgg
421	cgtttcctga	tgcagaacct	gtcactgccc	aacagcacgg	ccaagccct	cctagctgcc
481	cgtgtggacc	cttcgagann	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
541	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
601	nnnnnnnnnn	agctgctgct	ggctcctgcc	cttttggaa	agctcacatg	tgctccaggt
661	tctggggaac	tgggcccgat	tcttaccatg	cctgagggtc	atcaggtaga	ccttcagggc
721	taccgggatg	ctgtgtgcag	tgggcaggct	acagctcgtg	cccagcgctt	cagcgatttg
781	gccgctgagc	tcaggaaacca	gctggacaca	gccaagattg	ctcagcagct	gggcttcgat
841	gtccccaacg	gctcagatcc	ccagccacag	gcaccgtccc	cacagagcct	gccggcactc
901	ttaggggacc	tgctggatgc	ccagaaactt	ctgcaggatg	tggtatgtct	atcagccctt
961	gccctgctgc	tgccccaagg	tgctctgtgc	ggccaggcct	ctgcacctca	agccagcagc
1021	ctgaatggcc	tggccaacag	caccgggata	gggtgcaaatt	caggttccaa	caccactggt
1081	gaggagggca	cccagtcacc	tgctcagcca	gcctctcctg	acactctgca	agggcagtg
1141	tcagcctttg	tgcagctctg	ggctggcctg	caaccctatc	tgtgtggcaa	caaccgnnnn
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1861	ggcccaacac	cgggtggtcgc	ttctacttcc	tctatggctt	cgtctggatc	caggacatga
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2281	ggctcttcc	tgccgtctac	gctgtggcca	ctatcatggt	ttgcttccctg	gtgtctgtgc
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L3 ANSWER 106 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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GenBank VERSION (VER): AY421585.1 GI:39748444
CAS REGISTRY NO. (RN): 629085-71-8
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DATE (DATE): 17 Dec 2003
DEFINITION (DEF): Pan troglodytes ***ABCA2*** gene, VIRTUAL
TRANSCRIPT, partial sequence, genomic survey sequence.
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SOURCE: Pan troglodytes (chimpanzee)
ORGANISM (ORGN): Pan troglodytes
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Hominidae; Pan

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COMMENT:
This sequence was made by sequencing genomic exons and ordering them based on alignment.

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REFERENCE: 1 (bases 1 to 5289)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse
orthologous gene trios
JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)
OTHER SOURCE (OS): CA 140:140421
REFERENCE: 2 (bases 1 to 5289)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.

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361	aacaaccgnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
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1921	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1981	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnagga	gaccctgtggc
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2161	gtggtctcct	tcttgggcca	caacggggcg	ggcnnnnnnn	nnnnnnnnntc	catcctgacc
2221	ggcctgttcc	ctccaacgtc	gggttcngcc	accatctacg	ggcacgacat	ccgcacgnnn
2281	nnggatgaga	tccgcaannn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
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2581	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnngcc	gcaccatcct	tctgtccacc
2641	caccacatgg	atgaggctga	cctgcttggg	gaccgcattg	ccatcatctc	ccatgggaag
2701	ctcaagtgtc	gcgggtcccc	gctcttctct	aagggcacct	atggcgacgg	gtaccgcctc
2761	acgtctggtc	agcggccccc	cgagccgggg	ggcccccaag	agccagggct	ggcatccagc
2821	cccccaggtc	gggccccgct	gagcagctgc	tccgagctcc	agggtgtcca	gttcatccgc
2881	aagcatgtgg	cctcctgctc	gctgtgtctc	gacacaagca	cggagctctc	ctacatctct
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4201 tttggaaacg tctgaagtc catcccagcc tcatttggca ccagggccccc acccatggtg
4261 cggaagatcg cggtgccgag ggctgccagc nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn
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L3 ANSWER 107 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC): AY421584 GenBank (R)
GenBank ACC. NO. (GBN): AY421584
GenBank VERSION (VER): AY421584.1 GI:39748443
CAS REGISTRY NO. (RN): 629085-70-7
SEQUENCE LENGTH (SQL): 6117
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Genome Survey Sequence
DATE (DATE): 17 Dec 2003
DEFINITION (DEF): Homo sapiens ***ABCA2*** gene, VIRTUAL TRANSCRIPT,
partial sequence, genomic survey sequence.
KEYWORDS (ST): GSS
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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COMMENT:
This sequence was made by sequencing genomic exons and ordering them based on alignment.

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REFERENCE: 1 (bases 1 to 6117)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse
orthologous gene trios
JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)
OTHER SOURCE (OS): CA 140:140421
REFERENCE: 2 (bases 1 to 6117)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-NOV-2003) Celera Genomics, 45 West Gude
Drive, Rockville, MD 20850, USA

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FEATURES (FEAT):
Feature Key      Location      Qualifier
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/mol-type="genomic DNA"
/db-xref="taxon:9606"
gene             <1..>6117    /gene="ABCA2"
/locus-tag="HCM7606"

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61	cgacagaaga	agccccaccat	ctccgtgaag	gaagccttct	acacagcggc	gccccctgacg
121	tctgccggca	tccctgcctgt	catgcaatcg	ctgtgcccg	acggccagcg	agacgagttc
181	ggcttcctgc	agtacgccaa	ctccacnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
241	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
301	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
361	nnnnnnnnnn	tgtcttcctt	ctctctggac	tcggtggcca	gaaacccgca	ggagctctgg
421	cgtttcctga	cgaaaactt	gtcgtgccc	aatagcacgg	cccaagcact	cttgcccgcc
481	cgtgtggacc	cgcccgaggn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
541	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
601	nnnnnnnnng	agctgctgct	ggctcctgcc	ctcctggage	agctcacctg	cacgcggggc
661	tccgggggagc	tgggcccggat	cctcactgtg	cctgagagtc	agaagggagc	cctgcagggc
721	taccgggatg	ctgtctgcag	tgggcaggct	gctgcgctg	ccaggcgctt	ctctgggctg
781	tctgctgagc	tccggaacca	gctggacgtg	gccaaggtct	cccagcagct	gggcttggat
841	gcccccaacg	gctcggactc	ctcgccacag	gcgccacccc	cacggaggct	gcaggcgctt
901	ctggggggacc	tgttgatgc	ccagaaggtt	ctgcaggatg	tggatgtcct	gtcggccctg
961	gccttgctac	tgccccaggg	tgcttgcact	ggccggaccc	ccggaccccc	agccagtggg
1021	gcgggtgggg	cggccaatgg	cactggggca	ggggcagtc	tgggccccaa	cgccaccgct
1081	gaggagggcg	caccctctgc	tgcagcactg	gccaccccg	acacgctgca	ggcgagctgc
1141	tacagctctg	tacagctctg	ggccggcctg	cagcccatct	tgtgtggcaa	caaccgnnnn
1201	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1261	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1321	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1381	ggcaacgtga	ctcactatgc	ccaggtctgg	ctcaacatct	acgagacttt	tgtttttgtg
1441	ctggagcagg	gcaggctgca	gcaacacctg	cgtgtgctgc	cgccggagat	ccgcagcttc
1501	cggctgcacc	ccgaggcact	gaacctgtca	ctggatgagc	agcagtatgt	agcagagctg
1561	gacaacttct	cgtgcccag	tggcatggcc	ctcctgcagc	tgccgccggc	cctgagacag
1621	gcggcctgcg	gctggatcca	gttcatgtcc	aagnnnnnnn	agctggatac	cattgacaac
1681	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1741	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1801	tacaagatcc	gccagaactc	ccagaccggg	aaggacggct	cgctcccgcc	tcacgtgcac
1861	tggcggcctg	ggcccaatac	cagcttcacc	gagaaaacca	acgagatccg	ccgcgctac
1921	caggacatga	tggagcgcgc	tggcgccgcg	ttctacttcc	tctacggctt	cgtctggatc
1981	ggcagctacg	tgcagatggt	catcatcgac	actttttgtg	ggcacgacgt	ggtggagcca
2041	attgagcaca	tgatgccgct	cccctacccc	tgtacacac	gcgatgactt	cctgtttgtc
2101	atccagcaca	tcgtggcgga	gtgcatgggt	atctcctggg	tctactccgt	ggccatgacc
2161	ctgaacaacg	cgggtgactg	gaaggagcac	cggtcaagg	aggtgatgaa	gaccatgggc
2221	tccgtgacag	cactcacgcg	ggtggcctgg	ttcatcaccg	gctttgtgca	gctgtccatc
2281	gtcatcatct	ggetcttctt	catcctgaag	tacggccagg	tgcttatgca	cagccacgtg
2341	gtgtctgtgc	tgtactccaa	ggcagtctac	gcggtggcca	ccatcatggt	ctgcttctctg
2401	ctgagctacg	tgccctacat	ggccaagctg	gcctcggcct	gcggtggcat	catctacttc
2461	acggccttcg	agaagtgc	gtacgtggcg	atccgagagg	aggtggcgca	tgataagatc
2521	aagtacttcg	cgctgtatga	cgcgtccctc	atgtccacga	cggcctttgg	tctgggctct
2581	tccccgggtg	agggggacga	ggtggccggc	gtgggcatcc	agtggcacac	cttcagccag
2641	gccgtggtct	atggcatcct	cttcaacttg	ctcctggctg	tcaccatgct	gatggtggac
2701	nnnnnnnnnn	nnnnnnnnnn	cacgtggtac	attgaggctg	tgcacccagn	nnnnnnnnnn
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2821	naccaggcct	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
2881	cccaccacc	gtgccatgga	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
2941	aagaagctgg	tgccctctgg	gagccggcgc	tttgaggaga	cccgtggcat	ggaggaggag
3001	ttggggccaca	ccctgaacaa	tgtctgctg	gacaaactca	ccaaggtcta	caaggacgac
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3121	cgcaagaacc	gttccgccac	caagaccacc	accatgtcca	tcctgaccgg	cctgttccct
3181	nnnnnnnnnn	tgggcatgtg	catctacggg	cacgacatcc	gcacggagat	ggatgagatc
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L3 ANSWER 108 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD161955 GenBank (R)
GenBank ACC. NO. (GBN): BD161955
GenBank VERSION (VER): BD161955.1 GI:27867713
CAS REGISTRY NO. (RN): 495919-88-5
SEQUENCE LENGTH (SQL): 26
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 17 Jan 2003
DEFINITION (DEF): Simultaneous assay method of a plurality of different
molecular species proteins mRNA and kit container used
therefor.

KEYWORDS (ST): JP 2002181818-A/6
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified

NUCLEIC ACID COUNT (NA): 5 a 10 c 4 g 7 t

COMMENT:

OS Human ***ABCA2*** gene
PN JP 2002181818-A/6
PD 26-JUN-2002
PF 15-DEC-2000 JP 2000381621
PI MASUHIRO NISHIMURA,HIROSHI YAGUCHI,SHINSAKU NAITO,ISAO HIRAOKA
PC G01N33/53,C12N15/09,C12Q1/48,C12Q1/68,G01N33/566,C12N15/00 CC
Simultaneous assay method of a plurality of different CC
molecular species
CC proteins mRNA and kit container used therefor FH Key
Location/Qualifiers

FT source 1..26
FT /organism='Human ***ABCA2*** gene'.

REFERENCE: 1 (bases 1 to 26)
AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
TITLE (TI): Simultaneous assay method of a plurality of different
molecular species proteins mRNA and kit container used
therefor
JOURNAL (SO): Patent: JP 2002181818-A 6 26-JUN-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..26	/organism="unidentified" /db-xref="taxon:32644"

SEQUENCE (SEQ):

1 taccacgcct tcattcttcc ggacga

LOCUS (LOC): BD161954 GenBank (R)
 GenBank ACC. NO. (GBN): BD161954
 GenBank VERSION (VER): BD161954.1 GI:27867712
 CAS REGISTRY NO. (RN): 495919-87-4
 SEQUENCE LENGTH (SQL): 21
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor.
 KEYWORDS (ST): JP 2002181818-A/5
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 5 a 5 c 6 g 5 t
 COMMENT:
 OS Human ***ABCA2*** gene
 PN JP 2002181818-A/5
 PD 26-JUN-2002
 PF 15-DEC-2000 JP 2000381621
 PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
 PC G01N33/53, C12N15/09, C12Q1/48, C12Q1/68, G01N33/566, C12N15/00 CC
 Simultaneous assay method of a plurality of different molecular species
 CC proteins mRNA and kit container used therefor FH Key
 Location/Qualifiers
 FT source 1..21
 FT /organism='Human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 21)
 AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
 TITLE (TI): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor
 JOURNAL (SO): Patent: JP 2002181818-A 5 26-JUN-2002; OTSUKA PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
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SEQUENCE (SEQ):
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L3 ANSWER 110 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD161953 GenBank (R)
 GenBank ACC. NO. (GBN): BD161953
 GenBank VERSION (VER): BD161953.1 GI:27867711
 CAS REGISTRY NO. (RN): 495919-86-3
 SEQUENCE LENGTH (SQL): 19
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor.
 KEYWORDS (ST): JP 2002181818-A/4
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 7 a 6 c 4 g 2 t
 COMMENT:
 OS Human ***ABCA2*** gene
 PN JP 2002181818-A/4
 PD 26-JUN-2002
 PF 15-DEC-2000 JP 2000381621
 PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
 PC G01N33/53, C12N15/09, C12Q1/48, C12Q1/68, G01N33/566, C12N15/00 CC
 Simultaneous assay method of a plurality of different molecular species
 CC proteins mRNA and kit container used therefor FH Key

FT source 1..19
 FT /organism='Human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 19)
 AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
 TITLE (TI): Simultaneous assay method of a plurality of different
 molecular species proteins mRNA and kit container used
 therefor
 JOURNAL (SO): Patent: JP 2002181818-A 4 26-JUN-2002; OTSUKA
 PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..19	/organism="unidentified" /db-xref="taxon:32644"

SEQUENCE (SEQ):
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L3 ANSWER 111 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142982 GenBank (R)
 GenBank ACC. NO. (GBN): BD142982
 GenBank VERSION (VER): BD142982.1 GI:27848740
 CAS REGISTRY NO. (RN): 495730-15-9
 SEQUENCE LENGTH (SQL): 21
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Method of assaying human ABC transporter and probe and
 kit therefor.
 KEYWORDS (ST): JP 2002112775-A/53
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 5 a 5 c 6 g 5 t

COMMENT:
 OS human ***ABCA2*** gene
 PN JP 2002112775-A/53
 PD 16-APR-2002
 PF 03-OCT-2000 JP 2000303404
 PI MASUHIRO NISHIMURA,HIROSHI YAGUCHI,SHINSAKU NAITO,ISAO HIRAOKA
 PC C12N15/09,C12Q1/68,C12N15/00
 CC Method of assaying human ABC transporter and probe and kit CC
 therefor

FT Key Location/Qualifiers
 FT source 1..21
 FT /organism='human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 21)
 AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
 TITLE (TI): Method of assaying human ABC transporter and probe and
 kit therefor
 JOURNAL (SO): Patent: JP 2002112775-A 53 16-APR-2002; OTSUKA
 PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
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L3 ANSWER 112 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142981 GenBank (R)
 GenBank ACC. NO. (GBN): BD142981
 GenBank VERSION (VER): BD142981.1 GI:27848739
 CAS REGISTRY NO. (RN): 495730-14-8
 SEQUENCE LENGTH (SQL): 19
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Method of assaying human ABC transporter and probe and

KEYWORDS (ST): JP 2002112775-A/52
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified
NUCLEIC ACID COUNT (NA): 7 a 6 c 4 g 2 t
COMMENT:

OS human ***ABCA2*** gene
PN JP 2002112775-A/52
PD 16-APR-2002
PF 03-OCT-2000 JP 2000303404
PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
PC C12N15/09, C12Q1/68, C12N15/00
CC Method of assaying human ABC transporter and probe and kit CC
therefor
FH Key Location/Qualifiers
FT source 1..19
FT /organism='human ***ABCA2*** gene'.
REFERENCE: 1 (bases 1 to 19)
AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
TITLE (TI): Method of assaying human ABC transporter and probe and
kit therefor
JOURNAL (SO): Patent: JP 2002112775-A 52 16-APR-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):
Feature Key Location Qualifier
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L3 ANSWER 113 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142932 GenBank (R)
GenBank ACC. NO. (GBN): BD142932
GenBank VERSION (VER): BD142932.1 GI:27848690
CAS REGISTRY NO. (RN): 495729-65-2
SEQUENCE LENGTH (SQL): 26
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 17 Jan 2003
DEFINITION (DEF): Method of assaying human ABC transporter and probe and
kit therefor.
KEYWORDS (ST): JP 2002112775-A/3
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified
NUCLEIC ACID COUNT (NA): 5 a 10 c 4 g 7 t
COMMENT:

OS human ***ABCA2*** gene
PN JP 2002112775-A/3
PD 16-APR-2002
PF 03-OCT-2000 JP 2000303404
PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
PC C12N15/09, C12Q1/68, C12N15/00
CC Method of assaying human ABC transporter and probe and kit CC
therefor
FH Key Location/Qualifiers
FT source 1..26
FT /organism='human ***ABCA2*** gene'.
REFERENCE: 1 (bases 1 to 26)
AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
TITLE (TI): Method of assaying human ABC transporter and probe and
kit therefor
JOURNAL (SO): Patent: JP 2002112775-A 3 16-APR-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):
Feature Key Location Qualifier
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L3 ANSWER 114 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD140903 GenBank (R)
GenBank ACC. NO. (GBN): BD140903
GenBank VERSION (VER): BD140903.1 GI:23235848
CAS REGISTRY NO. (RN): 457151-68-7
SEQUENCE LENGTH (SQL): 8040
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
SOURCE: Rattus sp.
ORGANISM (ORGN): Rattus sp.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Rattus

NUCLEIC ACID COUNT (NA): 1673 a 2464 c 2199 g 1704 t

COMMENT:

OS Rattus sp. (rat)
PN WO 0208424-A/4
PD 31-JAN-2002
PF 26-JUL-2001 WO 2001JP006457
PR 26-JUL-2000 JP 00P 225462
PI NOBUYA INAGAKI
PC C12N15/12, C07K14/47, C12N1/15, C12N1/19, C12N1/21, C12N5/00,
G01N33/ PC 68,
PC G01N33/15, G01N33/50
CC Human and rat ***ABCA2*** gene
FH Key Location/Qualifiers
FT source 1..8040
FT /organism='Rattus sp. (rat)'.
1 (bases 1 to 8040)

REFERENCE:

AUTHOR (AU): Inagaki, N.
TITLE (TI): Human and rat ***ABCA2*** gene
JOURNAL (SO): Patent: WO 0208424-A 4 31-JAN-2002; BANYU
PHARMACEUTICAL CO LTD, NOBUYA INAGAKI

FEATURES (FEAT):

Feature Key	Location	Qualifier
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LOCUS (LOC): BD140902 GenBank (R)
GenBank ACC. NO. (GBN): BD140902
GenBank VERSION (VER): BD140902.1 GI:23235847
CAS REGISTRY NO. (RN): 457151-67-6
SEQUENCE LENGTH (SQL): 8040
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
SOURCE: Rattus sp.
ORGANISM (ORGN): Rattus sp.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Rattus

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COMMENT:
OS      Rattus sp. (rat)
PN      WO 0208424-A/3
PD      31-JAN-2002
PF      26-JUL-2001 WO 2001JP006457
PR      26-JUL-2000 JP 00P 225462
PI      NOBUYA INAGAKI
PC      C12N15/12,C07K14/47,C12N1/15,C12N1/19,C12N1/21,C12N5/00,
G01N33/ PC 68,
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CC      Human and rat ***ABCA2*** gene
FH      Key Location/Qualifiers
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FT      /organism='Rattus sp. (rat)'.

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DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
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ORGANISM (ORGN): Homo sapiens
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Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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NUCLEIC ACID COUNT (NA): 1525 a 2724 c 2469 g 1551 t

COMMENT:

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OS Homo sapiens (human)
PN WO 0208424-A/1
PD 31-JAN-2002
PF 26-JUL-2001 WO 2001JP006457
PR 26-JUL-2000 JP 00P 225462
PI NOBUYA INAGAKI
PC C12N15/12,C07K14/47,C12N1/15,C12N1/19,C12N1/21,C12N5/00,
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REFERENCE: 1 (bases 1 to 8269)
AUTHOR (AU): Inagaki,N.
TITLE (TI): Human and rat ***ABCA2*** gene
JOURNAL (SO): Patent: WO 0208424-A 1 31-JAN-2002; BANYU
PHARMACEUTICAL CO LTD,NOBUYA INAGAKI

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REFERENCE: 2 (bases 1 to 7437)
AUTHOR (AU): Anjard, C.; Loomis, W.F.
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721	cgcataaaat̄	tt̄ataaaat̄at̄	at̄ataaaaaa	aaaat̄gḡgag	agt̄tt̄aaat̄c	acaact̄taga
781	act̄tt̄act̄ca	aaaaaaat̄ct̄	tt̄t̄act̄taaaa	gḡtaaat̄caa	aat̄gt̄ḡcaat̄	tt̄gt̄tḡcgaa
841	at̄tt̄tt̄at̄tt̄cc	cgatt̄at̄tt̄gt̄	tat̄tt̄tt̄taḡta	at̄tt̄tt̄tḡcaa	tt̄tt̄taḡḡtaa	gt̄aaaaaata
901	aaaataaaaa	t̄aaact̄caat̄	ct̄at̄tt̄tt̄cag	ct̄at̄gt̄gt̄gt̄	gḡtḡtt̄atta	at̄cat̄tt̄tt̄ac
961	tt̄tt̄tt̄tt̄tt̄tt̄a	tt̄tt̄tt̄tt̄t̄at̄t̄	t̄caaacaat̄	taat̄tt̄tt̄c̄tt̄t̄	tat̄tt̄tt̄tt̄tt̄a	tt̄tt̄tt̄tt̄tt̄at̄
1021	tt̄tt̄tt̄tt̄tt̄tt̄a	at̄t̄aḡtt̄tt̄tḡ	gt̄t̄at̄gḡcat̄	tt̄aaaḡcaa	tt̄at̄gat̄cca	t̄ataat̄ḡcaa
1081	gt̄aact̄tt̄tḡt̄	taat̄aḡat̄tt̄t̄	ḡaaaat̄acag	t̄att̄act̄tt̄a	tḡḡtaat̄ḡca	gat̄gḡaḡcat̄
1141	t̄aaat̄gt̄tt̄ga	acaat̄taḡga	gt̄t̄at̄gaata	tt̄tt̄aaaḡaa	t̄gaaḡtt̄ḡca	acaḡcaaaaa
1201	at̄tt̄gaat̄tc	aacacaaat̄t̄	gat̄caact̄tt̄t̄	tt̄at̄aḡaḡat̄	taat̄gat̄caa	acaḡcaat̄gḡ
1261	aaḡcat̄tt̄c̄tt̄	t̄caaaaataaa	t̄caḡat̄tt̄tt̄ḡ	tat̄tt̄tt̄c̄tḡc	agt̄tt̄gḡtt̄t̄	aataat̄aḡtḡ
1321	cat̄tat̄caaḡ	tḡgt̄accaat̄	ccat̄tt̄t̄caat̄	ataat̄at̄taḡ	agt̄tt̄gat̄aḡt̄	gat̄ḡac̄gt̄ta
1381	tḡḡac̄act̄ga	aḡaḡtt̄ḡat̄t̄	aaaḡaḡḡat̄ḡ	atacat̄caga	taḡtḡaaḡtt̄	t̄at̄gt̄aaaga
1441	aac̄gt̄tt̄tt̄gt̄	tḡcaac̄acaa	gt̄tḡcaat̄gḡ	at̄caaḡcaat̄	c̄tt̄taḡtt̄ac	tt̄tḡgt̄tt̄aa
1501	ataaaac̄at̄t̄	aaat̄gt̄aaaḡ	gḡt̄caac̄gt̄t̄	at̄ccaḡat̄cc	at̄gḡac̄aḡaa	tt̄at̄gḡcaaa
1561	aat̄gḡat̄cca	aḡgt̄aḡaḡat̄	gḡt̄at̄tt̄tt̄ca	aaḡac̄gc̄aḡḡ	tt̄caḡtat̄tt̄	at̄cac̄aḡcaḡ
1621	cat̄t̄aat̄gat̄	tt̄tt̄gḡtt̄tt̄c̄	cḡtt̄taataa	caḡat̄tt̄taḡt̄	aatt̄ḡaaaaa	ḡaaact̄aaaa
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1741	tt̄acaaḡtt̄t̄	aḡt̄aact̄ḡct̄	ct̄acc̄aḡtt̄a	at̄tt̄aataat̄	tt̄caat̄tat̄t̄	tt̄aaaaḡgt̄t̄
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1861	taact̄tt̄tat̄t̄	act̄c̄tt̄gḡca	tt̄cat̄at̄tt̄aa	gt̄at̄gt̄tt̄tt̄t̄	tḡataaaat̄cc	aaat̄tt̄tt̄gt̄ḡ
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2521	tḡtat̄ḡaaaa	t̄caaatt̄cat̄	gc̄at̄tḡc̄tt̄ḡ	gt̄cc̄aaat̄gḡ	taḡtḡgḡtaaa	t̄caacaacca
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3241	ct̄gaat̄taaḡ	tt̄at̄cḡt̄c̄tt̄t̄	cc̄aat̄gt̄cat̄	tt̄t̄acc̄aca	tt̄tc̄ḡcc̄caa	tt̄tt̄tc̄cḡtḡ
3301	aaat̄tt̄gat̄ga	taḡat̄tt̄ac̄aa	t̄cat̄tt̄gḡtt̄	t̄act̄t̄act̄tt̄a	tḡgt̄at̄tt̄t̄ca	gt̄t̄ac̄ac̄at̄
3361	tḡgaaḡaḡgt̄	at̄tt̄c̄tt̄taḡt̄	c̄tt̄gḡtc̄gt̄ḡ	aaḡct̄gc̄at̄t̄	gḡaḡaaaḡgt̄	gḡtt̄tt̄caata
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3601	caat̄tat̄tat̄	gt̄ataaḡca	at̄gḡḡataac̄	cac̄aaat̄tt̄t̄	ct̄ataat̄aat̄	ḡct̄acc̄gt̄tc̄
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3721	cat̄caaat̄ga	act̄aaat̄tḡḡ	ḡaaaat̄tt̄c̄tt̄	t̄aaat̄t̄caaḡ	t̄cc̄atac̄tt̄t̄	aataaaatt̄ta
3781	gat̄tt̄at̄tt̄cc̄	ac̄aaaac̄aḡaa	aact̄tt̄tḡaaḡ	at̄tat̄tt̄taat̄	tḡaaḡḡtaaa	ac̄aaaat̄gḡtt̄
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4021	caaataat̄gcc̄	at̄tt̄taaac̄at̄	gt̄tt̄tt̄at̄caa	at̄tt̄tc̄gat̄c̄t̄	tḡcaaḡtḡaa	gḡtat̄gaata
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4141	cat̄tt̄cḡct̄gḡ	taat̄gt̄tt̄ḡca	caaḡaac̄ḡta	ccaat̄c̄gt̄gt̄	aaaḡaḡat̄ta	c̄tt̄tt̄at̄at̄tt̄
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7261 gaattaattc aatttattat tttaatttta aaattttttt acaaatcgaa agaaataata
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LOCUS (LOC): SEG F327658S GenBank (R)
GenBank ACC. NO. (GBN): AH010490
GenBank VERSION (VER): AH010490.1 GI:13173187
SEQUENCE LENGTH (SQL): 9553
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Contiguous sequences
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
***ABCA2*** ) gene, complete cds.
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
REFERENCE: 1 (bases 1 to 9553)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 9553)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany
FEATURES (FEAT):

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AF327665.1:1..388,gap(),AF327666.1:1..177,gap(),AF327667.1:1..134,
gap(),AF327668.1:1..178,gap(),AF327669.1:1..117,gap(),
AF327670.1:1..192,gap(),AF327671.1:1..103,gap(),AF327672.1:1..135,
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AF327675.1:1..215,gap(),AF327676.1:1..185,gap(),AF327677.1:1..199,
gap(),AF327678.1:1..233,gap(),AF327679.1:1..217,gap(),
AF327680.1:1..203,gap(),AF327681.1:1..200,gap(),AF327682.1:1..136,
gap(),AF327683.1:1..247,gap(),AF327684.1:1..217,gap(),
AF327685.1:1..123,gap(),AF327686.1:1..327,gap(),AF327687.1:1..234,
gap(),AF327688.1:1..116,gap(),AF327689.1:1..132,gap(),
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gap(),AF327693.1:1..159,gap(),AF327694.1:1..134,gap(),
AF327695.1:1..152,gap(),AF327696.1:1..138,gap(),AF327697.1:1..189,
gap(),AF327698.1:1..162,gap(),AF327699.1:1..155,gap(),
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gap(),AF327703.1:1..148,gap(),AF327704.1:1..225,gap(),
AF327705.1:1..398)
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L3 ANSWER 120 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC):          BI395334          GenBank (R)
GenBank ACC. NO. (GBN): BI395334
GenBank VERSION (VER): BI395334.1  GI:15088434
CAS REGISTRY NO. (RN): 350790-11-3
SEQUENCE LENGTH (SQL): 549
MOLECULE TYPE (CI):   mRNA; linear
DIVISION CODE (CI):   Expressed sequence tag
DATE (DATE):          6 Aug 2001
DEFINITION (DEF):     UMN32H07 Canine Brain cDNA Library Canis familiaris
                      cDNA 5' similar to ATP-binding cassette protein (
                      ***ABCA2*** ), mRNA sequence.
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SOURCE:              dog.
ORGANISM (ORGN):      Canis familiaris
                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                      Euteleostomi; Mammalia; Eutheria; Carnivora;
                      Fissipedia; Canidae; Canis
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NUCLEIC ACID COUNT (NA): 108 a 167 c 176 g 93 t 5 others

COMMENT:

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Contact: Mickelson, J.R.
Veterinary PathoBiology
University of Minnesota
1988 Fitch Avenue, University of Minnesota, St. Paul, MN 55108, USA
Tel: 612 624 1246
Fax: 612 625 0204
Email: micke001@umn.edu
Seq primer: M13 Reverse.
```

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REFERENCE:            1 (bases 1 to 549)
AUTHOR (AU):          Roberts,M.C.; Hendrickson,J.A.; Hoffmann,D.E.;
                      Flickinger,G.H.; Rutherford,M.S.; Mickelson,J.R.
TITLE (TI):           University of Minnesota Canine Brain EST Project
JOURNAL (SO):          Unpublished (2001)
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FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..549	/organism="Canis familiaris" /db-xref="taxon:9615" /clone-lib="Canine Brain cDNA Library" /sex="Male" /note="Organ: Brain; Vector: pSPORT1 (Gibco BRL); Site-1: NotI; Site-2: SalI; Tissue was taken from the frontal, occipital, temporal and parietal lobes,"

cerebellum, thalamus,
hypothalamus, midbrain, pons,
and medulla."

SEQUENCE (SEQ):

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121 cgaggcccgg  gtaggcagcg  ccccggcagg  ggcagggcag  aggaggggtg  ggccttgatg
181 tcccttcccc  cccaggtggt  caactgggca  ctggagaagc  tggagctgag  caagtacgag
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301 ctcacggcgt  acccggcctt  catcttcctg  gacgagccca  ccacaggcat  ggaccccaag
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421 tgacgtcaca  caacatggag  gaatgtnagg  cgctttgcac  tcggtgggcc  atcatgggtg
481 aacggcgcct  tgcgttgntg  ggcaggattc  aacacctgaa  gaaccgggtg  gagacggtac
541 attgntacg
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L3 ANSWER 121 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC008755 GenBank (R)
GenBank ACC. NO. (GBN): BC008755
GenBank VERSION (VER): BC008755.1 GI:14250598
CAS REGISTRY NO. (RN): 339782-14-8
SEQUENCE LENGTH (SQL): 3320
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 16 Sep 2003
DEFINITION (DEF): Homo sapiens ATP-binding cassette, sub-family A (ABC1),
member 2, mRNA (cDNA clone IMAGE:3344721), partial cds.
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 640 a 1112 c 949 g 619 t
COMMENT:

Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),
Gaithersburg, Maryland;
Web site: <http://www.nisc.nih.gov/>
Contact: nisc_mgc@nhgri.nih.gov
Akhter, N., Ayale, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R.,
Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C.,
McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W.,
Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L.,
Young, A., Zhang, L.-H. and Green, E.D.
Clone distribution: MGC clone distribution information can be found
through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAL Plate: 5 Row: d Column: 15.

REFERENCE: 1 (bases 1 to 3320)
AUTHOR (AU): Strausberg, R.L.; Feingold, E.A.; Grouse, L.H.;
Derge, J.G.; Klausner, R.D.; Collins, F.S.; Wagner, L.;
Shenmen, C.M.; Schuler, G.D.; Altschul, S.F.; Zeeberg, B.;
Buetow, K.H.; Schaefer, C.F.; Bhat, N.K.; Hopkins, R.F.;
Jordan, H.; Moore, T.; Max, S.I.; Wang, J.; Hsieh, F.;
Diatchenko, L.; Marusina, K.; Farmer, A.A.; Rubin, G.M.;
Hong, L.; Stapleton, M.; Soares, M.B.; Bonaldo, M.F.;
Casavant, T.L.; Scheetz, T.E.; Brownstein, M.J.;
Usdin, T.B.; Toshiyuki, S.; Carninci, P.; Prange, C.;
Raha, S.S.; Loquellano, N.A.; Peters, G.J.; Abramson, R.D.;
Mullahy, S.J.; Bosak, S.A.; McEwan, P.J.; McKernan, K.J.;
Malek, J.A.; Gunaratne, P.H.; Richards, S.; Worley, K.C.;
Hale, S.; Garcia, A.M.; Gay, L.J.; Hulyk, S.W.;
Villalon, D.K.; Muzny, D.M.; Sodergren, E.J.; Lu, X.;
Gibbs, R.A.; Fahey, J.; Helton, E.; Kettelman, M.; Madan, A.;
Rodrigues, S.; Sanchez, A.; Whiting, M.; Madan, A.;
Young, A.C.; Shevchenko, Y.; Bouffard, G.G.;
Blakesley, R.W.; Touchman, J.W.; Green, E.D.;

Myers, R.M.; Butterfield, Y.S.; Krzywinski, M.I.;
 Skalska, U.; Smailus, D.E.; Schnerch, A.; Schein, J.E.;
 Jones, S.J.; Marra, M.A.

TITLE (TI): Generation and initial analysis of more than 15,000
 full-length human and mouse cDNA sequences
 JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903
 (2002)

OTHER SOURCE (OS): CA 138:84317
 REFERENCE: 2 (bases 1 to 3320)

AUTHOR (AU): Strausberg, R.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (25-MAY-2001) National Institutes of Health,
 Mammalian Gene Collection (MGC), Cancer Genomics
 Office, National Cancer Institute, 31 Center Drive,
 Room 11A03, Bethesda, MD 20892-2590, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..3320	/organism="Homo sapiens" /mol-type="mRNA" /db-xref="taxon:9606" /clone="IMAGE:3344721" /tissue-type="Eye, retinoblastoma" /clone-lib="NIH-MGC-16" /lab-host="DH10B-R" /note="Vector: pOTB7"
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CDS	<1..2606	/gene="ABCA2" /codon-start=3 /product="ABCA2 protein" /protein-id="AAH08755.1" /db-xref="GI:14250599" /db-xref="LocusID:20" /db-xref="MIM:600047" /translation="RFFDSMCLESFTQGLPLSNF VPPPPSPAPSDSPASPDLDQAWN VSLPPTAGPEMWTSAAPSLPRLVREPVRCTCSAQG TGFSCPSSVGGHPPQMRVVAGDIL TDITGHNVSLEYLLFTSDRFRHLHRYGAITFGNVLK SIPASFGTRAPPMVRKIAVRRRAQ VFYNNKGYHSMPTYLNSLNNAILRANLPKSKGNP AAYGITVTNHPMNKTSASLSLDYL LQGTDVVIAIFIIIVAMSFVPASFVFLVAEKSTK AKHLQFVSGCNPIIYWLANYVWDM LNYLVPATCCVILFVFDLPAYTSPTNFPVAVLSL FLLYGWSITPIMYPASFWFEVPSS AYVFLIVINLFIGITATVATFLLQLFEHDKDLKV VNSYLKSCFLIFPNYNLGHGLMEM AYNEYINEYYAKIGQFDKMKSPFEWDIVTRGLVA MAVEGVVGFLLTIMCQYNFLRRPQ RMPVSTKPVEDDQDVASERQVRVLRGDADNDMVKI ENLTKVYKSRKIGRILAVDRLCLG VRPGECEGFLLGVNAGKTSTFKMLTGDESTTGGE AFVNGHSVLKELLQVQQLGYCPQ CDALFDELTAAREHLQLYTRLRGISWKDEARVVKW ALEKLELTKYADKPACTYSGGNKR KLSTAIALIGYPAFIFLDEPTTGMDPKARRFLWN LILDLIKTGRSVVLTSHSMEECEA LCTRLAIMVNGRLRCLGSIQHLKNRFGDGYMITV RTKSSQSVKDVVRFFNRNFPPEAML KERHHTKVQYQLKSEHISLAQVFSKMEQVSGVLG IEDYSVSQTTLDNVFVNFAKKQSD NLEQQETEPSPALQSPLGCLLSLLRPRSAPELRL ALVADEPEDLDTEDEGLISFEEER AQLSFNTDTLC"
misc-feature	1443..2300	/gene="ABCA2" /note="CcmA; Region: ABC-type multidrug transport system, ATPase component [Defense mechanisms]" /db-xref="CDD:COG1131"


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121  tgcaggcctg  gaacgtctcc  ctgccgcccc  ccgctgggcc  agaaatgtgg  acgtcggcac
181  cctccctgcc  gcgcctggta  cgggagcccg  tccgctgcac  ctgctctgcg  cagggcacccg
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2341  tcagccagac  cacactggac  aatgtgttcg  tgaactttgc  caagaagcag  agtgacaacc
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2581  ccttcaacac  ggacacgctc  tgctgaccac  ccagagctgg  gccagggagg  acacgctcca
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3121  gctggcaggt  ggcaggaatg  gagaagctga  cctgctggc  caggcaagg  gccagacccc
3181  ccccaacccc  cagctgccat  cgctctccca  cccagcttgg  cccctgccc  gccacctcc
3241  ctgggagccg  ggctgtaca  tagcgcacag  atgtttgttt  taaataaata  aacaaaatgt
3301  caaaaaaaaa  aaaaaaaaaa

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L3 ANSWER 122 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

```

LOCUS (LOC): F327658S48 GenBank (R)
GenBank ACC. NO. (GBN): AF327705
GenBank VERSION (VER): AF327705.1 GI:13173235
CAS REGISTRY NO. (RN): 325624-59-7
SEQUENCE LENGTH (SQL): 398
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
***ABCA2*** ) gene, exon 48 and complete cds.
SEGMENT: 48 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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REFERENCE: 1 (bases 1 to 398) -
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 398)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..398	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
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 AF327703.1:1..148,
 AF327704.1:1..225,
 1..>46)
 join(AF327658.1:1147..1 /gene="ABCA2"
 212,AF327659.1:11..104,
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 AF327661.1:8..171,
 AF327662.1:11..138,
 AF327663.1:8..118,
 AF327664.1:11..229,
 AF327665.1:11..378,
 AF327666.1:8..167,
 AF327667.1:1..129,
 AF327668.1:6..173,
 AF327669.1:11..107,
 AF327670.1:9..182,
 AF327671.1:1..103,
 AF327672.1:11..125,
 AF327673.1:11..201,
 AF327674.1:11..161,
 AF327675.1:11..215,
 AF327676.1:11..175,
 AF327677.1:11..191,
 AF327678.1:11..223,
 AF327679.1:11..207,
 AF327680.1:11..193,
 AF327681.1:11..195,
 AF327682.1:6..126,
 AF327683.1:1..237,
 AF327684.1:11..217,
 AF327685.1:11..113,
 AF327686.1:6..322,
 AF327687.1:11..224,
 AF327688.1:1..106,

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AF327690.1:11..71,
AF327691.1:1..175,
AF327692.1:11..126,
AF327693.1:2..149,
AF327694.1:6..129,
AF327695.1:11..143,
AF327696.1:11..128,
AF327697.1:6..184,
AF327698.1:11..152,
AF327699.1:11..145,
AF327700.1:6..109,
AF327701.1:11..103,
AF327702.1:6..108,
AF327703.1:6..143,
AF327704.1:9..215,
11..46)

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/codon-start=1
/product="ABC transporter ABCA2"
/protein-id="AAK14335.1"
/db-xref="GI:13173236"
/translation="MGFLHQLQLLLWKNVTLKRR
SPWVLAFEIFIPLVLFFILLGLRQ
KKPTISVKEVPFYTAAPLTSAGILPVMQSLCPDG
ORDEFGFLQYANSTVTQLLERLDR
VVEEGNLFDPARPSLGSELEALRQHLEALSAGPG
TSGSHLDRSTVSSFSLDSVARNPQ
ELWRFLTQNLSLPNSTAQALLAARVDPPEVYHLL
FGPSSALDSQSGLHKGQEPWSRLG
GNPLFRMEELLAPALLEQLTCTPGSGELGRILT
VPESQKGALQGYRDAVCSGQAAAR
ARRFSGLSAELRNQLDVAKVSQQLGLDAPNGSDS
SPQAPPPRRRLQALLGDLDDAQKVL
QDVDVLSALALLLPQGACTIONTPGPPASGAGGAA
NGTGAGAVMGPNTAEAGAPSAAA
LATPDTLQGCFAFVQLWAGLQPILCGNNRTIEP
EALRRGNMSSLGFTSKEQRNLGLL
VHLMTSNPKILYAPAGSEVDRVILKANETFAFVG
NVTHYAQVWLNISAEIRSFLEQGR
LQQHRLRWLQQYVAELRLHPEALNLSLDELPPALR
QDNFSLPSGMALLOQLDITIDNAAC
GWIQFMSKVSVDIFKGFDPDEESIVNYTLNQAYQD
NVTVFASVIFQTRKDGSLPPHVHY
KIRQNSSFTEKTNEIRRAYWRPGPNTGGRFYFLY
GFVWIIQDMMERAIIDTFVGHVVE
PGSYVQMFPPYPCYTRDDFLFVIEHMMPLCMVISW
VYSVAMTIQHIVAEKEHRLKEVMK
TMGLNNAVHWVAVFITGFVQLSISVTALTALILKY
GQVLMHSHVVIWLFLAVYAVATI
MFCFLVSVLYSKAKLASACGGIIYFLSYVPYMY
AIREEVAHDKITAFKCIASLMST
TAFGLGSKYFALYEVAGVGIQWHTFSQSPVEGDD
FNLLAVTMLMVDVAVYGILTWYI
EAVHPGMYGLPRPWYFPLQKSYWLGSGRTEAWEW
SWPWARTPRLSVMEEDQACAMESR
RFEETRGMEEEPHTLPLVVCVDKLTKVYKDDKKL
ALNKLSLNLYENQVVSFLGHNGAG
KTTTMSILTGLFPPTSGSATIYGHDIRTEMDEIR
KNLGMCPQHNVLFDRLTVEEHLWF
YSRLKSMAQEEIRREMDKMIEDLELSNKRHSLVQ
TLSGGMKRKLSVAIAFVGGSRAT
LDEPTAGVDPYARRAIWDLILKYKPGRTILLSTH
HMDEADLLGDRIAIISHGKLKCCG
SPLFLKGTYGDDYRLTLVKRPAEPGGPQEPGLAS
SPPGRAPLSSCSELQVSQFIRKHV
ASCLLVSDTSTELSYILPSEAAKGAFAERLFQHL
ERSLDALHLSSFGLMDTTLEEVL
KVSEEDQSLENSEADVKEKRDVLPGAEGPASGE
GHAGNLARCELTQSQASLQSASS
VGSARGDEGAGYTDVYGDYRPLFDNPQDPDNVSL
QEVEAEALSRVQGQSRKLDGGWLK
VRQFHGLLVKRFHCARRNSKALFSQ
ILLPAFFVCVAMTVALSVP EIGDLPPLVLSPSQ
YHNYTQPRGNFI PYANEERREYRLRLSPDASPQQ
LVSTFRLPSGVGATCVLKS PANGS
LGPTLNLSSGESRLLAARFFDSMCLESFTQGLPL
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AWNVSLPPTAGPEMWTSAAPSLPRLVREPVRCTCS
 AQGTGFSCPSSVGGHPPQMRVVTG
 DILTDITGHNVSEYLLFTSDRFLHRYGAITFGN
 VLKSIPASFGTRAPPMVRKIAVRR
 AAQVFYNNKGYHSMPTYLNSLNNAILRANLPKSK
 GNPAAYGITVTNHPMNKTSASLSL
 DYLLQGTDVVIAIFIIVAMSFVPASFVFLVAEK
 STKAKHLQFVSGCNPIIYWLANYV
 WDMNLNLPATCCVILFVFDLPAYTSPTNFPV
 LSLFLLYGWSITPIMYPASFWEV
 PSSAYVFLIVINLFIGITATVATFLLQLFEHDKD
 LKVVNSYLKSCFLIFPNYNLGHGL
 MEMAYNEYINEYYAKIGQFDKMKSPFEWDIVTRG
 LVAMAVEGVVGFLLTIMCQYNFLR
 RPQRMVSTKPVEDDVVDASERQVRVLRGDADNDM
 VKIENLTKVYKSRKIGRILAVDRL
 CLGVRLEGECFLLGVNGAGKTSTFKMLTGDESTT
 GGEAFVNGHSLVKELLQVQOQSLGY
 CPQCDALFDELTAREHLQLYTRLRGISWKDEARV
 VKWALEKLELTKYADKPAGTYSGG
 NKRKLSTALIGYPAFIFLDEPTTGMDPKARRF
 LWNLILDLIKTGRSVVLTSHSMEE
 CEALCTRLAIMVNGRLRCLGSIQHLKNRFGDGYM
 ITVRTKSSQSVKDVVRFFNRFPE
 AMLKERHHTKVQYQLKSEHISLAQVFSKMEQVSG
 VLGIEDYSVSQTTLDNVFVNFACK
 QSDNLEQQETEPSPALQSPLGCLLSLLRPRSAPT
 ELRALVADEPEDLDTEDEGLISFE
 EERAQLSFNTDTLC"
 /gene="ABCA2"
 /number=48

exon 11...>46

SEQUENCE (SEQ):

1 ctgtgcacag gccagctgt ccttcaacac ggacacgctc tgctgaccac ccagagctgg
 61 gccagggagg acacgctcca ctgaccaccc agagctgggc cagggactca acaatgggga
 121 cagaagtccc ccagtgcctg ccagggcctg gagtggaggt tcaggaccaa ggggcttctg
 181 gtcctccagc ccctgtactc ggccatgccc tgtgtgctact gcggttgccg cccctaattg
 241 tgccaaaggc tgacccggcc cgggctgcgt acacccttgc cctgctttgc cttaaagcct
 301 cgggggtctgc ccggcccctc gccctgcctt ggcactgctc accgccaag gcgacgccgg
 361 ctggaccagg cactgctggc ctttctctctg cccggcct

L3 ANSWER 123 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S47 GenBank (R)
 GenBank ACC. NO. (GBN): AF327704
 GenBank VERSION (VER): AF327704.1 GI:13173234
 CAS REGISTRY NO. (RN): 325624-58-6
 SEQUENCE LENGTH (SQL): 225
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 47.
 SEGMENT: 47 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 43 a 75 c 75 g 32 t
 REFERENCE: 1 (bases 1 to 225)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 225)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..225	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	9..215	/map="9q34" /gene="ABCA2" /number=47

SEQUENCE (SEQ):

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1 cccaccaggt gttcgtgaac tttgccaga agcagagtga caacctggag cagcaggaga
61 cggagccgcc atccgcactg cagtcccctc tcggctgctt gctcagcctg ctccggcccc
121 ggtctgcccc cacggagctc cgggcacttg tggcagacga gcccaggagc ctggacacgg
181 aggacgaggg cctcatcagc ttcgaggagg agcgggtgag caggc

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L3 ANSWER 124 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S46 GenBank (R)

GenBank ACC. NO. (GBN): AF327703

GenBank VERSION (VER): AF327703.1 GI:13173233

CAS REGISTRY NO. (RN): 325624-57-5

SEQUENCE LENGTH (SQL): 148

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT: 46 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 36 a 40 c 48 g 24 t

REFERENCE: 1 (bases 1 to 148)

AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.;
Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.;
Schmitz, G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 148)

AUTHOR (AU): Kaminski, W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..148	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..143	/map="9q34" /gene="ABCA2" /number=46

SEQUENCE (SEQ):

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1 tgcaggagcg gcaccacaca aagggtgcagt accagctcaa gtcggagcac atctcgctgg
61 cccaggtgtt cagcaagatg gagcaggtgt ctggcgtgct gggcatcgag gactactcgg
121 tcagccagac cacactggag aatgtgag

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L3 ANSWER 125 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S45 GenBank (R)

GenBank ACC. NO. (GBN): AF327702

GenBank VERSION (VER): AF327702.1 GI:13173232

CAS REGISTRY NO. (RN): 325624-56-4

SEQUENCE LENGTH (SQL): 113

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 45.

SEGMENT: 45 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 27 a 28 c 37 g 21 t

REFERENCE: 1 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..113	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..108	/map="9q34" /gene="ABCA2" /number=45

SEQUENCE (SEQ):

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1 accaggtttg gagatggcta catgatcacg gtgcggacca agagcagcca gagtgtgaag
61 gacgtggtgc gggtcttcaa ccgcaacttc ccggaagcca tgctcaaggt gcg

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L3 ANSWER 126 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S44 GenBank (R)

GenBank ACC. NO. (GBN): AF327701

GenBank VERSION (VER): AF327701.1 GI:13173231

CAS REGISTRY NO. (RN): 325624-55-3

SEQUENCE LENGTH (SQL): 113

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 44.

SEGMENT: 44 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 20 a 33 c 43 g 17 t

REFERENCE: 1 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):


```
LOCUS (LOC):          F327658S42           GenBank (R)
GenBank ACC. NO. (GBN): AF327699
GenBank VERSION (VER): AF327699.1   GI:13173229
CAS REGISTRY NO. (RN): 325624-53-1
SEQUENCE LENGTH (SQL): 155
MOLECULE TYPE (CI):    DNA; linear
DIVISION CODE (CI):    Primates
DATE (DATE):           1 Mar 2001
DEFINITION (DEF):      Homo sapiens ABC transporter ***ABCA2*** (
                        ***ABCA2*** ) gene, exon 42.
SEGMENT:               42 of 48
SOURCE:                human.
```


Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 32 a 49 c 47 g 27 t

REFERENCE:

AUTHOR (AU):

1 (bases 1 to 155)
Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI):

Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO):

OTHER SOURCE (OS):

Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
CA 135:191114

REFERENCE:

AUTHOR (AU):

TITLE (TI):

JOURNAL (SO):

2 (bases 1 to 155)
Kaminski,W.E.
Direct Submission

Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..155	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..145	/map="9q34" /gene="ABCA2" /number=42

SEQUENCE (SEQ):

1 ccctggccag gtggtgaagt gggctctgga gaagctggag ctgaccaagt acgcagacaa
61 gccggctggc acctacagcg gcggcaacaa gcggaagctc tccacggcca tcgccctcat
121 tgggtaccca gccttcattc tcttggttaag tcctg

L3 ANSWER 129 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S41

GenBank (R)

GenBank ACC. NO. (GBN):

AF327698

GenBank VERSION (VER):

AF327698.1 GI:13173228

CAS REGISTRY NO. (RN):

325624-52-0

SEQUENCE LENGTH (SQL):

162

MOLECULE TYPE (CI):

DNA; linear

DIVISION CODE (CI):

Primates

DATE (DATE):

1 Mar 2001

DEFINITION (DEF):

Homo sapiens ABC transporter ***ABCA2*** (

ABCA2) gene, exon 41.

SEGMENT:

41 of 48

SOURCE:

human.

ORGANISM (ORGN):

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 26 a 50 c 59 g 27 t

REFERENCE:

AUTHOR (AU):

1 (bases 1 to 162)
Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI):

Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO):

OTHER SOURCE (OS):

Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
CA 135:191114

REFERENCE:

AUTHOR (AU):

TITLE (TI):

JOURNAL (SO):

2 (bases 1 to 162)
Kaminski,W.E.

Direct Submission

Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..162	/organism="Homo sapiens" /db-xref="taxon:9606"

exon 11..152 /map="9q34"
/gene="ABCA2"
/number=41

SEQUENCE (SEQ):

1 gtgtccccag cgtgctgaag gagctgctcc aggtgcagca gagcctcggc tactgcccgc
61 agtgtgacgc gctgttcgac gagctcacgg cccgggagca cctgcagctg tacacgcggc
121 tgcgtgggat ctcttggaag gacgaggccc ggggtgaggat ct

L3 ANSWER 130 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S40 GenBank (R)
GenBank ACC. NO. (GBN): AF327697
GenBank VERSION (VER): AF327697.1 GI:13173227
CAS REGISTRY NO. (RN): 325624-51-9
SEQUENCE LENGTH (SQL): 189
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 40.
SEGMENT: 40 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 32 a 53 c 70 g 34 t
REFERENCE: 1 (bases 1 to 189)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 189)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..189	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..184	/map="9q34" /gene="ABCA2" /number=40

SEQUENCE (SEQ):

1 gccagggtcta caagtcccgg aagattggcc gtatcctggc cggtgaccgc ctgtgcctgg
61 gtgtgcgtct tggcgagtgc ttcgggctcc tgggcgtcaa cggtgcgggc aagaccagca
121 ccttcaagat gctgaccggc gacgagagca cgacgggggg cgaggccttc gtcaatggac
181 acagggtggg

L3 ANSWER 131 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S39 GenBank (R)
GenBank ACC. NO. (GBN): AF327696
GenBank VERSION (VER): AF327696.1 GI:13173226
CAS REGISTRY NO. (RN): 325624-50-8
SEQUENCE LENGTH (SQL): 138
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 39.
SEGMENT: 39 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens

Eutelēostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 30 a 35 c 49 g 24 t

REFERENCE: 1 (bases 1 to 138)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 138)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..138	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..128	/map="9q34" /gene="ABCA2" /number=39

SEQUENCE (SEQ):

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1  gtccccaag gcgcattgct gtgtctacca agcctgtgga ggatgatgtg gacgtggcca
61  gtgagcggca gcgagtgtc cggggagacg ccgacaatga catggtcaag attgagaacc
121 tgaccaaggt gggctctg

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L3 ANSWER 132 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S38 GenBank (R)

GenBank ACC. NO. (GBN): AF327695

GenBank VERSION (VER): AF327695.1 GI:13173225

CAS REGISTRY NO. (RN): 325624-49-5

SEQUENCE LENGTH (SQL): 152

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT: 38 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 25 a 45 c 50 g 32 t

REFERENCE: 1 (bases 1 to 152)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 152)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..152	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"

exon 11..143 /gene="ABCA2"
 /number=38

SEQUENCE (SEQ):
 1 ctccccgcag gccagtttga caagatgaag tccccgttcg agtgggacat tgtcaccgcg
 61 ggactgggtgg ccatggcggt tgagggcgtc gtgggcttcc tcctgaccat catgtgccag
 121 tacaacttcc tgcggcgggc acagtgagtg gg

L3 ANSWER 133 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S37 GenBank (R)
 GenBank ACC. NO. (GBN): AF327694
 GenBank VERSION (VER): AF327694.1 GI:13173224
 CAS REGISTRY NO. (RN): 325624-48-4
 SEQUENCE LENGTH (SQL): 134
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 37.

SEGMENT: 37 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 37 a 37 c 32 g 28 t
 REFERENCE: 1 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..134	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..129	/map="9q34" /gene="ABCA2" /number=37

SEQUENCE (SEQ):
 1 cgcaggacct gaaggttgct aacagttacc tgaaaagctg cttcctcatt ttccccaact
 61 acaacctggg ccacgggctc atggagatgg cctacaacga gtacatcaac gactactacg
 121 ccaagattgg tgag

L3 ANSWER 134 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S36 GenBank (R)
 GenBank ACC. NO. (GBN): AF327693
 GenBank VERSION (VER): AF327693.1 GI:13173223
 CAS REGISTRY NO. (RN): 325624-47-3
 SEQUENCE LENGTH (SQL): 159
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 36.

SEGMENT: 36 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 24 a 59 c 37 g 39 t
REFERENCE: 1 (bases 1 to 159)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 159)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..159	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	2..149	/gene="ABCA2" /number=36

SEQUENCE (SEQ):
1 ggtggtccat cagcccatc atgtaccggt cctccttctg gttcgaggtc cccagctccg
61 cctacgtgtt cctcattgtc atcaatctct tcatcggtat caccgccacc gtggccacct
121 tcctgctaca gctcttcgag cagcacaagg tggggcggt

L3 ANSWER 135 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S35 GenBank (R)
GenBank ACC. NO. (GBN): AF327692
GenBank VERSION (VER): AF327692.1 GI:13173222
CAS REGISTRY NO. (RN): 325624-46-2
SEQUENCE LENGTH (SQL): 136
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
ABCA2) gene, exon 35.
SEGMENT: 35 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 19 a 55 c 26 g 36 t
REFERENCE: 1 (bases 1 to 136)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 136)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..136	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..126	/gene="ABCA2"

SEQUENCE (SEQ):

1 acccctgcag ctcaactacc tggccccgc tacctgctgt gtcacatccc tgttttgtggt
 61 cgacctgccg gcctacacgt cgcccaccaa cttccctgcc gtcctctccc tcttctgct
 121 ctatgggtaa gcggaa

L3 ANSWER 136 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S34 GenBank (R)
 GenBank ACC. NO. (GBN): AF327691
 GenBank VERSION (VER): AF327691.1 GI:13173221
 CAS REGISTRY NO. (RN): 325624-45-1
 SEQUENCE LENGTH (SQL): 185
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 34.
 SEGMENT: 34 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 30 a 60 c 53 g 42 t
 REFERENCE: 1 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..185	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..175	/gene="ABCA2" /number=34

SEQUENCE (SEQ):

1 gctgcagggc acggatgtcg tcctcgccat cttcatcatc gtggccatgt ccttcgtgcc
 61 ggccagcttc gttgtcttcc tcgtggccga gaagtcacc aaggccaagc acctgcagtt
 121 tgtcagcggc tgcaacccca tcctctactg gctggcgaac tacgtgtggg acatgggtgcg
 181 cccgg

L3 ANSWER 137 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S33 GenBank (R)
 GenBank ACC. NO. (GBN): AF327690
 GenBank VERSION (VER): AF327690.1 GI:13173220
 CAS REGISTRY NO. (RN): 325624-44-0
 SEQUENCE LENGTH (SQL): 81
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 33.
 SEGMENT: 33 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

REFERENCE: 1 (bases 1 to 81)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 81)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..81	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..71	/gene="ABCA2" /number=33

SEQUENCE (SEQ):
 1 ccgtgtgcag gcatcaccgt caccaaccac cccatgaata agaccagcgc cagcctctcc
 61 ctggattacc tgtaagtgtg g

L3 ANSWER 138 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S32 GenBank (R)
 GenBank ACC. NO. (GBN): AF327689
 GenBank VERSION (VER): AF327689.1 GI:13173219
 CAS REGISTRY NO. (RN): 325624-43-9
 SEQUENCE LENGTH (SQL): 132
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 32.
 SEGMENT: 32 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Homnidae; Homo
 NUCLEIC ACID COUNT (NA): 34 a 48 c 28 g 22 t
 REFERENCE: 1 (bases 1 to 132)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 132)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..132	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..122	/gene="ABCA2" /number=32

1 ccttctgacg gttttctaca acaacaaggg ctatcacagc atgccacct acctcaacag
61 cctcaacaac gccatcctgc gtgccaacct gcccaagagc aagggcaacc cggcggctta
121 cggtagagctg ac

L3 ANSWER 139 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S31 GenBank (R)
GenBank ACC. NO. (GBN): AF327688
GenBank VERSION (VER): AF327688.1 GI:13173218
CAS REGISTRY NO. (RN): 325624-42-8
SEQUENCE LENGTH (SQL): 116
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 31.
SEGMENT: 31 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 22 a 36 c 38 g 20 t
REFERENCE: 1 (bases 1 to 116)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 116)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..116	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..106	/gene="ABCA2" /number=31

SEQUENCE (SEQ):
1 gtatggggcc atcacctttg gaaacgtcct gaagtccatc ccagcctcat ttggcaccag
61 ggccccaccc atggtgcgga agatcgcggt gcgcagggtg gccaggtga gcgagg

L3 ANSWER 140 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S30 GenBank (R)
GenBank ACC. NO. (GBN): AF327687
GenBank VERSION (VER): AF327687.1 GI:13173217
CAS REGISTRY NO. (RN): 325624-41-7
SEQUENCE LENGTH (SQL): 234
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 30.
SEGMENT: 30 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 35 a 90 c 69 g 40 t
REFERENCE: 1 (bases 1 to 234)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 234)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..234	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..224	/gene="ABCA2" /number=30

SEQUENCE (SEQ):
 1 gtgcccacag aaatgtggac gtcggcacc ctcctgccgc gcctgggtacg ggagcccgtc
 61 cgctgcacct gctctgcgca gggcaccggc ttctcctgcc ccagcagtgt gggcgggcac
 121 ccgccccaga tgcgggtggt cacaggcgac atcctgaccg acatcaccgg ccacaatgtc
 181 tctgagtacc tgcctctcac ctccgaccgc ttccgactgc accggtgagc tggg

L3 ANSWER 141 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S29 GenBank (R)
 GenBank ACC. NO. (GBN): AF327686
 GenBank VERSION (VER): AF327686.1 GI:13173216
 CAS REGISTRY NO. (RN): 325624-40-6
 SEQUENCE LENGTH (SQL): 327
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 29.
 SEGMENT: 29 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 43 a 126 c 101 g 57 t
 REFERENCE: 1 (bases 1 to 327)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 327)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..327	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..322	/gene="ABCA2" /number=29

SEQUENCE (SEQ):
 1 cgcaggctgc ggctatcgcc cgacgccagc cccagcagc tcgtgagcac gttccggctg

121 acgttgāāc̄c̄ t̄gāgcāgcgg ggāḡtc̄gcgc ctgctggcḡḡ ctcggt̄t̄ctt c̄gaāc̄gcatg
 181 tgtctggagt ccttcacaca ggggctgcca ctgtccaatt tcgtgccacc cccaccctcg
 241 cccgccccat ctgactcgcc agcgtccccg gatgaggacc tgcaggcctg gaacgtctcc
 301 ctgccgccca ccgctgggcc aggtagt

L3 ANSWER 142 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S28 GenBank (R)
 GenBank ACC. NO. (GBN): AF327685
 GenBank VERSION (VER): AF327685.1 GI:13173215
 CAS REGISTRY NO. (RN): 325624-39-3
 SEQUENCE LENGTH (SQL): 123
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 28.
 SEGMENT: 28 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 22 a 51 c 29 g 21 t
 REFERENCE: 1 (bases 1 to 123)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 123)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..123	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..113	/gene="ABCA2" /number=28

SEQUENCE (SEQ):
 1 gccctgccag gtgatctgcc cccgctggtc ctgtcacctt cccagtacca caactacacc
 61 cagccccgtg gcaatttcac cccctacgcc aacgaggagc gccgcgagta ccggtgagggc
 121 ctc

L3 ANSWER 143 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S27 GenBank (R)
 GenBank ACC. NO. (GBN): AF327684
 GenBank VERSION (VER): AF327684.1 GI:13173214
 CAS REGISTRY NO. (RN): 325624-38-2
 SEQUENCE LENGTH (SQL): 217
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 27.
 SEGMENT: 27 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 32 a 73 c 71 g 41 t
 REFERENCE: 1 (bases 1 to 217)

Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 217)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..217	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..217	/gene="ABCA2" /number=27

SEQUENCE (SEQ):
1 ctctgcacag aggtggaggc agaggccctg tcgagggctcg gccagggcag ccgcaagctg
61 gacggcgggt ggctgaaggt gcgccagttc cacgggctgc tggtaaaccg cttccactgc
121 gcccgccgca actccaaggc actcttctcc cagatcttgc tgccagcctt cttcgtctgc
181 gtggccatga ccgtggccct gtccgtcccg gagattg

L3 ANSWER 144 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S26 GenBank (R)
GenBank ACC. NO. (GBN): AF327683
GenBank VERSION (VER): AF327683.1 GI:13173213
CAS REGISTRY NO. (RN): 325624-37-1
SEQUENCE LENGTH (SQL): 247
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 26.
SEGMENT: 26 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 42 a 72 c 90 g 43 t
REFERENCE: 1 (bases 1 to 247)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 247)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..247	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..237	/gene="ABCA2" /number=26

1 atgtgaagga gtccaggaag gatgtgctcc ctggggcgga gggcccgagg tctggggagg
 61 gtcacgtctg caatctggcc cgggtgctcg agctgaccca gtcgcaggca tgcgtgcagt
 121 cggcgatcat tgtgggctct gcccggtggc acgagggagc tggctacacc gacgtctatg
 181 gcgactaccg cccctctctt gataaccac aggaccaga caatgtcagc ctgcaagggtg
 241 ggggtgg

L3 ANSWER 145 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S25 GenBank (R)
 GenBank ACC. NO. (GBN): AF327682
 GenBank VERSION (VER): AF327682.1 GI:13173212
 CAS REGISTRY NO. (RN): 325624-36-0
 SEQUENCE LENGTH (SQL): 136
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 25.
 SEGMENT: 25 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 28 a 35 c 51 g 22 t
 REFERENCE: 1 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..136	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..126	/gene="ABCA2" /number=25

SEQUENCE (SEQ):
 1 tgcagcacct ggagcgcagc ctggatgcac tgcacctcag cagcttcggg ctgatggaca
 61 cgaccctgga ggaagtgttc ctcaagggtg cggaggagga tcagtcgctg gagaacagtg
 121 aggccggtga ggggcc

L3 ANSWER 146 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S24 GenBank (R)
 GenBank ACC. NO. (GBN): AF327681
 GenBank VERSION (VER): AF327681.1 GI:13173211
 CAS REGISTRY NO. (RN): 325624-35-9
 SEQUENCE LENGTH (SQL): 200
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 24.
 SEGMENT: 24 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 33 a 76 c 57 g 34 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 200)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..200	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..195	/gene="ABCA2" /number=24

SEQUENCE (SEQ):

```

1 tccccacag agccagggtc ggcattccagc cccccagggtc gggccccgct gagcagctgc
61 tccgagctcc aggtgtccca gttcatccgc aagcatgtgg cctcctgcct gctgggtctca
121 gacacaagca cggagctctc ctacatcctg cccagcgcagg ccgccaagaa gggggctttc
181 gagcgcctct tccagggtgtg

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L3 ANSWER 147 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S23 GenBank (R)
GenBank ACC. NO. (GBN): AF327680
GenBank VERSION (VER): AF327680.1 GI:13173210
CAS REGISTRY NO. (RN): 325624-34-8
SEQUENCE LENGTH (SQL): 203
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
ABCA2) gene, exon 23.)
SEGMENT: 23 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 31 a 74 c 58 g 40 t
REFERENCE: 1 (bases 1 to 203)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 203)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..203	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..193	/gene="ABCA2" /number=23

SEQUENCE (SEQ):

1 cttgtcctag gccgcacat ctttctgtcc acccaccaca tggatgagggc tgacctgctt
 61 ggggaccgca ttgccatcat ctcccatggg aagctcaagt gctgcggctc cccgctcttc
 121 ctcaaggga cctatggcga cgggtaccgc ctcacgctgg tcaagcggcc cgccgagccg
 181 gggggccccc aaggtctgtg ttg

L3 ANSWER 148 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S22 GenBank (R)
 GenBank ACC. NO. (GBN): AF327679
 GenBank VERSION (VER): AF327679.1 GI:13173209
 CAS REGISTRY NO. (RN): 325624-33-7
 SEQUENCE LENGTH (SQL): 217
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 22.
 SEGMENT: 22 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 39 a 71 c 70 g 37 t
 REFERENCE: 1 (bases 1 to 217)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 217)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..217	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..207	/gene="ABCA2" /number=22

SEQUENCE (SEQ):

1 cctgtcccag gatgatcgag gacctggagc tctccaacaa acggcactca ctggtgcaga
 61 cattgtcggg tggcatgaag cgcaagctgt ccgtggccat cgccttcgtg ggcggctctc
 121 gcgccatcat cctggacgag cccacggcgg gcgtggaccc ctacgcgcgc cgcgccatct
 181 gggacctcat cctgaagtac aagccaggtg agtgggg

L3 ANSWER 149 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S21 GenBank (R)
 GenBank ACC. NO. (GBN): AF327678
 GenBank VERSION (VER): AF327678.1 GI:13173208
 CAS REGISTRY NO. (RN): 325624-32-6
 SEQUENCE LENGTH (SQL): 233
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 21.
 SEGMENT: 21 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

REFERENCE: 1 (bases 1 to 233)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 233)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..233	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34" /gene="ABCA2" /number=21
exon	11..223	

SEQUENCE (SEQ):

```

1 acctacccag gtccatcctg accggcctgt tccctccaac gtcgggttcc gccaccatct
61 acgggcacga catccgcacg gagatggatg agatccgcaa gaacctgggc atgtgccgcg
121 agcacaatgt gctctttgac cggctcacgg tggaggaaca cctctggttc tactcacggc
181 tcaagagcat ggctcaggag gagatccgca gagagatgga caagtgggtg ggc

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L3 ANSWER 150 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S20 GenBank (R)
 GenBank ACC. NO. (GBN): AF327677
 GenBank VERSION (VER): AF327677.1 GI:13173207
 CAS REGISTRY NO. (RN): 325624-31-5
 SEQUENCE LENGTH (SQL): 199
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 20.
 SEGMENT: 20 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 48 a 59 c 60 g 32 t
 REFERENCE: 1 (bases 1 to 199)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 199)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..199	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34" /gene="ABCA2"
exon	11..191	

SEQUENCE (SEQ):

1 cctgggtgcag aggagacccg tggcatggag gaggagccca cccacctgcc tctggttgct
 61 tgcgtggaca aactcaccaa ggtctacaag gacgacaaga agctggccct gaacaagctg
 121 agcctgaacc tctacgagaa ccaggtggtc tccttcttgg gccacaacgg ggcgggcaag
 181 accaccacca tgtgagtgt

L3 ANSWER 151 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S19 GenBank (R)
 GenBank ACC. NO. (GBN): AF327676
 GenBank VERSION (VER): AF327676.1 GI:13173206
 CAS REGISTRY NO. (RN): 325624-30-4
 SEQUENCE LENGTH (SQL): 185
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***). gene, exon 19.
 SEGMENT: 19 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 29 a 58 c 69 g 29 t
 REFERENCE: 1 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..185	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..175	/gene="ABCA2" /number=19

SEQUENCE (SEQ):

1 cgacccccag gcatgtacgg gctgccccgg ccctgggtact tcccactgca gaagtcctac
 61 tggctgggca gtggcgccgac agaagcctgg gaggaggagct ggccgtgggc acgcaccccc
 121 cgcctcagtg tcatggagga ggaccaggcc tgtgcatatg agagccggcg ctttggtgag
 181 gctgg

L3 ANSWER 152 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S18 GenBank (R)
 GenBank ACC. NO. (GBN): AF327675
 GenBank VERSION (VER): AF327675.1 GI:13173205
 CAS REGISTRY NO. (RN): 325624-29-1
 SEQUENCE LENGTH (SQL): 215
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***). gene, exon 18.
 SEGMENT: 18 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 32 a 65 c 66 g 52 t
 REFERENCE: 1 (bases 1 to 215)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 215)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..215	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..215	/gene="ABCA2" /number=18

SEQUENCE (SEQ):
 1 gcctttctcag tccctcatgt ccacgacggc ctttggtctg ggctctaagt acttcgcgct
 61 gtatgaggtg gccggcgtgg gcatccagtg gcacaccttc agccagtccc cggtggaggg
 121 ggacgacttc aacttgctcc tggctgtcac catgctgatg gtggacgccg tggctcatgg
 181 catcctcacg tggtacattg aggctgtgca cccag

L3 ANSWER 153 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S17 GenBank (R)
 GenBank ACC. NO. (GBN): AF327674
 GenBank VERSION (VER): AF327674.1 GI:13173204
 CAS REGISTRY NO. (RN): 325624-28-0
 SEQUENCE LENGTH (SQL): 171
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 17.
 SEGMENT: 17 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 30 a 50 c 54 g 37 t
 REFERENCE: 1 (bases 1 to 171)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 171)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..171	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"

SEQUENCE (SEQ):

1 gccacccag cttcctggtg tctgtgctgt actccaaggc caagctggcc tcggcctgcg
 61 gtggcatcat ctacttctg agctacgtgc cctacatgta cgtggcgatc cgagaggagg
 121 tggcgcatga taagatcacg gccttcgaga agtgcacgc ggtgagggtc g

L3 ANSWER 154 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S16 GenBank (R)
 GenBank ACC. NO. (GBN): AF327673
 GenBank VERSION (VER): AF327673.1 GI:13173203
 CAS REGISTRY NO. (RN): 325624-27-9
 SEQUENCE LENGTH (SQL): 211
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 16.
 SEGMENT: 16 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 37 a 67 c 61 g 46 t
 REFERENCE: 1 (bases 1 to 211)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 211)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..211	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..201	/map="9q34" /gene="ABCA2" /number=16

SEQUENCE (SEQ):

1 ccaccgcag gtgatgaaga ccatgggcct gaacaacgcg gtgcactggg tggcctgggt
 61 catcaccggc ttgtgcagc tgtccatctc cgtgacagca ctcaccgcca tcttgaagta
 121 cggccagggtg cttatgcaca gccacgtggt catcatctgg ctcttctctg cagtctacgc
 181 ggtggccacc atcatgttct ggtgagcgcg g

L3 ANSWER 155 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S15 GenBank (R)
 GenBank ACC. NO. (GBN): AF327672
 GenBank VERSION (VER): AF327672.1 GI:13173202
 CAS REGISTRY NO. (RN): 325624-26-8
 SEQUENCE LENGTH (SQL): 135
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 15.
 SEGMENT: 15 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 23 a 41 c 42 g 29 t
REFERENCE: 1 (bases 1 to 135)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 135)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..135	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..125	/gene="ABCA2" /number=15

SEQUENCE (SEQ):
1 ctccccgcag cttcctgttt gtcattgagc acatgatgcc gctgtgcatg gtgatctcct
61 ggggtctactc cgtggccatg accatccagc acatcgtggc ggagaaggag caccggctca
121 aggaggtgcg cgggc

L3 ANSWER 156 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S14 GenBank (R)
GenBank ACC. NO. (GBN): AF327671
GenBank VERSION (VER): AF327671.1 GI:13173201
CAS REGISTRY NO. (RN): 325624-25-7
SEQUENCE LENGTH (SQL): 103
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** ((***ABCA2***) gene, exon 14.
SEGMENT: 14 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 22 a 31 c 30 g 20 t
REFERENCE: 1 (bases 1 to 103)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 103)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..103	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..103	/gene="ABCA2"

SEQUENCE (SEQ):

1 acatgatgga ggcgcgccatc atcgacactt ttgtgggggca cgacgtggtg gagccaggca
61 gctacgtgca gatgttcccc taccctgtct acacacgcga tga

L3 ANSWER 157 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S13 GenBank (R)
GenBank ACC. NO. (GBN): AF327670
GenBank VERSION (VER): AF327670.1 GI:13173200
CAS REGISTRY NO. (RN): 325624-24-6
SEQUENCE LENGTH (SQL): 192
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 13.
SEGMENT: 13 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 38 a 69 c 52 g 33 t
REFERENCE: 1 (bases 1 to 192)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 192)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..192	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	9..182	/map="9q34" /gene="ABCA2" /number=13

SEQUENCE (SEQ):

1 ggccccaggt gtgatcttcc agaccgcgaa ggacggctcg ctccgcctc acgtgcacta
61 caagatccgc cagaactcca gcttcaccga gaaaaccaac gagatccgcc ggcctactg
121 gcggcctggg cccaatactg gcggccgctt ctacttcctc tacggcttcg tctggatcca
181 gggtagaggag ca

L3 ANSWER 158 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S12 GenBank (R)
GenBank ACC. NO. (GBN): AF327669
GenBank VERSION (VER): AF327669.1 GI:13173199
CAS REGISTRY NO. (RN): 325624-23-5
SEQUENCE LENGTH (SQL): 117
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 12.
SEGMENT: 12 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 26 a 38 c 29 g 24 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 117)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..117	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..107	/gene="ABCA2" /number=12

SEQUENCE (SEQ):
1 ctcccgctag gtagcgctgg acatcttcaa gggcttcccc gacgaggaga gcattgtcaa
61 ctacaccctc aaccaggcct accaggacaa cgctactgtt tttgccagtg agctgcc

L3 ANSWER 159 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S11 GenBank (R)
GenBank ACC. NO. (GBN): AF327668
GenBank VERSION (VER): AF327668.1 GI:13173198
CAS REGISTRY NO. (RN): 325624-22-4
SEQUENCE LENGTH (SQL): 178
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 11.
SEGMENT: 11 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 36 a 57 c 53 g 32 t
REFERENCE: 1 (bases 1 to 178)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 178)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..178	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..173	/gene="ABCA2" /number=11

SEQUENCE (SEQ):

61 tgccg̃ccg̃gc c̃ctg̃ag̃ac̃ag̃ g̃ac̃aãc̃tt̃ct c̃g̃c̃t̃g̃c̃cc̃ag̃ t̃gg̃cat̃g̃g̃cc c̃t̃c̃t̃g̃c̃ag̃c
 121 agctggatac cattgacaac gcggcctgcg gctggatcca gttcatgtcc aagggtgag

L3 ANSWER 160 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S10 GenBank (R)
 GenBank ACC. NO. (GBN): AF327667
 GenBank VERSION (VER): AF327667.1 GI:13173197
 CAS REGISTRY NO. (RN): 325624-21-3
 SEQUENCE LENGTH (SQL): 134
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 10.
 SEGMENT: 10 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 25 a 41 c 41 g 27 t
 REFERENCE: 1 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..134	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..129	/gene="ABCA2" /number=10

SEQUENCE (SEQ):
 1 gccaacgaga cttttgcttt tgtgggcaac gtgactcact atgccaggt ctggctcaac
 61 atctcggcgg agatccgcag cttcctggag cagggcaggc tgcagcaaca cctgcgctgg
 121 ctgcagcagg tgcc

L3 ANSWER 161 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S09 GenBank (R)
 GenBank ACC. NO. (GBN): AF327666
 GenBank VERSION (VER): AF327666.1 GI:13173196
 CAS REGISTRY NO. (RN): 325624-20-2
 SEQUENCE LENGTH (SQL): 177
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 9.
 SEGMENT: 9 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 36 a 63 c 52 g 26 t
 REFERENCE: 1 (bases 1 to 177)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 177)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..177	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	8..167	/map="9q34" /gene="ABCA2" /number=9

SEQUENCE (SEQ):
 1 accccagcac cattgaaccc gaggcgctgc ggcggggcaa catgagctcc ctgggcttca
 61 cgagcaagga gcagcggaac ctgggcctcc tcgtgcacct catgaccagc aaccccaaaa
 121 tcctgtacgc gcctgcgggc tctgaggtcg accgcgtcat cctcaagggtg cacgggt

L3 ANSWER 162 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S08 GenBank (R)
 GenBank ACC. NO. (GBN): AF327665
 GenBank VERSION (VER): AF327665.1 GI:13173195
 CAS REGISTRY NO. (RN): 325624-19-9
 SEQUENCE LENGTH (SQL): 388
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (8 of 48 human.)
 SEGMENT: 8 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 55 a 141 c 132 g 60 t

REFERENCE: 1 (bases 1 to 388)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 388)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..388	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..378	/map="9q34" /gene="ABCA2" /number=8

SEQUENCE (SEQ):
 1 ttccctcag ctgggcctgg atgcccccaa cggctcggac tcctcgccac aggcgccacc
 61 cccacggagg ctgcaggcgc ttctggggga cctgctggat gccagaagg ttctgcagga

181 ccccggaacc ccagccagt gtcgggtgg ggcggccaat ggcactggg caagggaagt
 241 catgggcccc aacgccaccg ctgaggagg cgcaccctct gctgcagcac tggccacccc
 301 ggacacgctg cagggccagt gctcagcctt cgtacagctc tgggccggcc tgcagcccat
 361 cttgtgtggc aacaaccggt aggtgggc

L3 ANSWER 163 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S07 GenBank (R)
 GenBank ACC. NO. (GBN): AF327664
 GenBank VERSION (VER): AF327664.1 GI:13173194
 CAS REGISTRY NO. (RN): 325624-18-8
 SEQUENCE LENGTH (SQL): 239
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 7.
 SEGMENT: 7 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 32 a 79 c 85 g 43 t
 REFERENCE: 1 (bases 1 to 239)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 239)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..239	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..229	/gene="ABCA2" /number=7

SEQUENCE (SEQ):
 1 cccatcccag gagctgctgc tggctcctgc cctcctggag cagctcacct gcacgccggg
 61 ctcgggggag ctggggccgga tcctcactgt gcctgagagt cagaaggagg ccctgcaggg
 121 ctaccgggat gctgtctgca gtgggcaggc tgctgcgcgt gccaggcgct tctctgggct
 181 gtctgctgag ctccggaacc agctggacgt ggccaaggct tcccagcagg tgaggccct

L3 ANSWER 164 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S06 GenBank (R)
 GenBank ACC. NO. (GBN): AF327663
 GenBank VERSION (VER): AF327663.1 GI:13173193
 CAS REGISTRY NO. (RN): 325624-17-7
 SEQUENCE LENGTH (SQL): 128
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 6.
 SEGMENT: 6 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 20 a 42 c 37 g 29 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 128)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..128	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	8..118	/gene="ABCA2" /number=6

SEQUENCE (SEQ):
1 ctccctagggtc taccacctgc tcttttggtcc ctcattctgcc ctggattcac agtctggcct
61 ccacaagggt caggagccct ggagccgcct agggggcaat ccctgttcc ggatggaggt
121 gagggcat

L3 ANSWER 165 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S05 GenBank (R)
GenBank ACC. NO. (GBN): AF327662
GenBank VERSION (VER): AF327662.1 GI:13173192
CAS REGISTRY NO. (RN): 325624-16-6
SEQUENCE LENGTH (SQL): 148
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
ABCA2) gene, exon 5.
SEGMENT: 5 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 25 a 51 c 42 g 30 t
REFERENCE: 1 (bases 1 to 148)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 148)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..148	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..138	/gene="ABCA2" /number=5

1 gcctgtccag tgtcttcctt ctctctggac tccgtggcca gaaacccgca ggagctctgg
61 cgtttcctga cgcaaaactt gtcgctgcc aatagcacgg cccaagcact cttggccgcc
121 cgtgtggacc cgcccagggt aaggcagg

L3 ANSWER 166 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S04 GenBank (R)
GenBank ACC. NO. (GBN): AF327661
GenBank VERSION (VER): AF327661.1 GI:13173191
CAS REGISTRY NO. (RN): 325624-15-5
SEQUENCE LENGTH (SQL): 179
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 4.
SEGMENT: 4 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 29 a 60 c 65 g 25 t
REFERENCE: 1 (bases 1 to 179)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 179)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..179	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	8..171	/gene="ABCA2" /number=4

SEQUENCE (SEQ):
1 ggtgcagggt cacgcagctg cttgagcgcc tggaccgcgt ggtggaggaa ggcaacctgt
61 ttgaccagc gcggcccagc ctgggctcag agctcgaggc cctacgccag catctggagg
121 ccctcagtgc gggcccgggc acctcgggga gccacctgga cagatccaca ggtgtgcc

L3 ANSWER 167 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S03 GenBank (R)
GenBank ACC. NO. (GBN): AF327660
GenBank VERSION (VER): AF327660.1 GI:13173190
CAS REGISTRY NO. (RN): 325624-14-4
SEQUENCE LENGTH (SQL): 131
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 3.
SEGMENT: 3 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 20 a 50 c 35 g 26 t
REFERENCE: 1 (bases 1 to 131)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;

TITLE (TI): Schmitz,G.
 Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 131)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
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 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT: 2 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 18 a 34 c 33 g 29 t

REFERENCE: 1 (bases 1 to 114)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 114)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

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 ORGANISM (ORGN): Homo sapiens
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 REFERENCE: 1 (bases 1 to 1222)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 1222)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

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DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) mRNA, complete cds.
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 1371 a 2495 c 2239 g 1377 t
REFERENCE: 1 (bases 1 to 7482)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 7482)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
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L3 ANSWER 171 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (03-FEB-2000) Nobuya Inagaki, Akita
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 Physiology; Hondo 1-1-1, Akita, Akita 010-8543, Japan
 (E-mail: inagaki@med.akita-u.ac.jp, Tel: +81-18-884-6060,
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L3 ANSWER 172 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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GenBank VERSION (VER): AF178941.1 GI:9957466
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DIVISION CODE (CI): Primates

DEFINITION (DEF): Homo sapiens ATP-binding cassette sub-family A member 2
 (***ABCA2***) mRNA, complete cds.

SOURCE: human.

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 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 1461 a 2694 c 2416 g 1485 t

REFERENCE: 1 (bases 1 to 8056)
 AUTHOR (AU): Vulevic,B.; Chen,Z.; Boyd,J.T.; Davis,W. Jr.;
 Walsh,E.S.; Belinsky,M.G.; Tew,K.D.
 TITLE (TI): Cloning and characterization of human adenosine
 5'-triphosphate-binding cassette, sub-family A,
 transporter 2 (***ABCA2***)
 JOURNAL (SO): Cancer Res., 61 (8), 3339-3347 (2001)
 OTHER SOURCE (OS): CA 135:72979

REFERENCE: 2 (bases 1 to 8056)
 AUTHOR (AU): Vulevic,B.; Chen,Z.; Walsh,E.S.; Tew,K.D.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (19-AUG-1999) Pharmacology, Fox Chase Cancer
 Center, 7701 Burholme avenue, Philadelphia, PA 19111,
 USA

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7261  t̃g̃g̃c̃ãg̃ãc̃g̃ã  g̃c̃c̃c̃g̃ãg̃g̃ãc̃  c̃t̃g̃g̃ãc̃ãc̃g̃g̃  ãg̃g̃ãc̃g̃ãg̃g̃g̃  c̃c̃t̃c̃ãt̃c̃ãg̃c̃  t̃t̃c̃g̃ãg̃g̃ãg̃g̃
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7501  c̃c̃ãg̃c̃c̃c̃c̃t̃g̃  t̃ãc̃t̃c̃g̃g̃c̃c̃ã  t̃g̃c̃c̃c̃t̃g̃c̃g̃g̃  t̃c̃ãc̃t̃g̃c̃g̃g̃t̃  t̃g̃c̃c̃g̃c̃c̃c̃c̃t̃  ããt̃t̃g̃t̃g̃c̃c̃ã
7561  ããg̃g̃c̃t̃g̃ãc̃c̃  c̃g̃g̃c̃c̃c̃g̃g̃g̃c̃  t̃g̃c̃g̃t̃ãc̃ãc̃c̃  c̃t̃t̃g̃c̃c̃c̃t̃g̃c̃  t̃t̃t̃g̃c̃c̃t̃t̃ãã  ãg̃c̃c̃t̃c̃g̃g̃g̃g̃
7621  t̃c̃t̃g̃c̃c̃c̃g̃g̃c̃  c̃c̃c̃t̃c̃g̃c̃c̃c̃c̃  t̃g̃c̃c̃t̃g̃g̃c̃ãc̃  t̃g̃c̃t̃c̃ãc̃c̃g̃c̃  c̃c̃ããg̃g̃c̃g̃ãc̃  g̃c̃c̃g̃g̃c̃t̃g̃g̃ã
7681  c̃c̃ãg̃c̃ãc̃t̃g̃  c̃t̃g̃g̃c̃c̃t̃t̃t̃c̃  t̃c̃c̃t̃g̃c̃c̃g̃g̃  c̃c̃t̃c̃g̃g̃ããc̃c̃  ãg̃c̃t̃t̃t̃t̃c̃t̃c̃  t̃c̃t̃t̃ãc̃g̃ãt̃g̃
7741  ããg̃g̃c̃t̃g̃ãt̃g̃  c̃c̃g̃ãg̃ãg̃c̃g̃g̃  g̃c̃t̃g̃t̃g̃g̃g̃c̃g̃  g̃ãg̃c̃t̃g̃g̃g̃t̃c̃  ãg̃t̃c̃c̃c̃g̃t̃ãt̃  t̃t̃ãt̃t̃t̃t̃g̃c̃t̃
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7861  c̃ãt̃c̃ãg̃c̃t̃t̃g̃  g̃g̃c̃c̃ãg̃c̃t̃g̃g̃  c̃ãg̃g̃t̃g̃g̃c̃ãg̃  g̃ããt̃g̃g̃ãg̃ãã  g̃c̃t̃g̃ãc̃c̃c̃t̃g̃  c̃t̃g̃g̃c̃c̃ãg̃g̃c̃
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L3 ANSWER 173 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC): AB037924 GenBank (R)
GenBank ACC. NO. (GBN): AB037924
GenBank VERSION (VER): AB037924.1 GI:9711458
CAS REGISTRY NO. (RN): 284459-17-2
SEQUENCE LENGTH (SQL): 298
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 12 Oct 2000
DEFINITION (DEF): Homo sapiens mRNA for ABC1, partial cds.
SOURCE: Homo sapiens placenta cDNA to mRNA.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 60 a 87 c 77 g 72 t 2 others
REFERENCE: 1 (sites)
AUTHOR (AU): Zhao,L.X.; Zhou,C.J.; Tanaka,A.; Nakata,M.;
Hirabayashi,T.; Amachi,T.; Shioda,S.; Ueda,K.;
Inagaki,N.
TITLE (TI): Cloning, characterization and tissue distribution of
the rat ATP-binding cassette (ABC) transporter ABC2/
***ABCA2***
JOURNAL (SO): Biochem. J., 350 Pt 3, 865-872 (2000)
OTHER SOURCE (OS): CA 134:189574
REFERENCE: 2 (bases 1 to 298)
AUTHOR (AU): Ueda,K.; Kioka,N.; Tanaka,A.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (02-FEB-2000) Kazumitsu Ueda, Kyoto
University Graduate School of Agriculture, Division of
Applied Life Sciences; Kitashirakawa, Sakyo-ku, Kyoto,
kyoto 606-8502, Japan (E-mail:uedak@kais.kyoto-u.ac.jp,
Tel:81-75-753-6105, Fax:81-75-753-6104)

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CDS 88..>298

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121 tggaagaacc tcacttttcag aagaagacaa acatgtcagc tggtactgga agtggcctgg
181 cctctattta tcttcctgat cctgatctct gttcggctga gctaccacc ctatgaacaa
241 catgaatgcc attttccaaa taaagccatg ccctctgcag gaacacttcc ttgggttc

L3 ANSWER 174 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): HSU18236 GenBank (R)
GenBank ACC. NO. (GBN): U18236
GenBank VERSION (VER): U18236.1 GI:609357
CAS REGISTRY NO. (RN): 161102-16-5
SEQUENCE LENGTH (SQL): 393
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 30 Nov 1999
DEFINITION (DEF): Human ATP-binding cassette protein (***ABCA2***)
mRNA HHCMH89 clone, partial cds.
SOURCE:
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 86 a 118 c 126 g 63 t
REFERENCE:
1 (bases 1 to 283)
AUTHOR (AU): Adams,M.D.; Dubnick,M.; Kerlavage,A.R.; Moreno,R.;
Kelley,J.M.; Utterback,T.R.; Nagle,J.W.; Fields,C.;
Venter,J.C.
TITLE (TI): Sequence identification of 2,375 human brain genes
JOURNAL (SO): Nature, 355 (6361), 632-634 (1992)
OTHER SOURCE (OS): CA 116:122477
REFERENCE:
2 (sites)
AUTHOR (AU): Allikmets,R.; Gerrard,B.; Glavac,D.; Ravnik-Glavac,M.;
Jenkins,N.A.; Gilbert,D.J.; Copeland,N.G.; Modi,W.;
Dean,M.
TITLE (TI): Characterization and mapping of three new mammalian
ATP-binding transporter genes from an EST database
JOURNAL (SO): Mamm. Genome, 6 (2), 114-117 (1995)
OTHER SOURCE (OS): CA 123:77444
REFERENCE:
3 (bases 1 to 393)
AUTHOR (AU): Dean,M.C.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (02-DEC-1994) Michael C. Dean, National
Cancer Institute, NCI-FCRDC, Frederick, MD 21702, USA

FEATURES (FEAT):

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gene	<1..>393	
CDS	<1..>393	

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SEQUENCE (SEQ):

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121 agccttcata ttcctggacg agcccaccac aggcattggac cccaaggccc ggcgcttcct
181 ctggaacctc atcctcgacc tcatcaagac agggcggtca gtggtgctga catcacacag
241 catggaggag tgcgaggcgc tgtgcacgcg gctggccatc atgggtgaac ggtcgccctgc
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STN INTERNATIONAL LOGOFF AT 16:23:13 ON 16 SEP 2004
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